Trust and Transformation in the Water Sector in South Africa

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Abstract

Water policy under the 1956 Water Act actively discouraged participation and water was managed centrally. The principles enshrined in the National Water Act (no 36 of 1998), designed in line with international sustainable development goals that actively encourage participation of a wide range of stakeholders operating closest to the resources that are being used, require a shift from governing through direct controls to governance where the state interacts with a wide range of interest groups. Although policy seemingly embraces a new water management paradigm, the old is being resurrected with all the contradictions and contortions that precipitated the shift in focus from the old to the new in the first place. There is on the one hand an undeveloped notion of what participation should entail, but there is also a culture in the domain of water that negotiates meanings around technical rather than social discourses. It is the absence of knowledge, the unequal power relationship between water users and the inhibition of agency that makes participation so difficult and keeps those who have knowledge, in - and those who do not have knowledge, out, with the unintended consequence of strengthening bonds between those who have had, in the past, privileged access to water. Those who suffer water deprivation have not been able to use their franchise to improve their access to water and their access to decision-making bodies in the water sector. Repeated failures to achieve reform are costly in terms of finance, and they are costly because they affect the production of trust and make it difficult to retain the 'spirit of the law.' The changing role of the state and the influence that state policy and intervention has in developing or hindering the production of trust and the perpetuation or production of shame is pivotal. Trust is a valuable but volatile resource and the broader set of analytic tools have provided a scaffold using the following set of analytic themes: style of government, way in which bureaucrats accept or resist change, ability of non-state and state actors to develop synergistic relationships, equalising of power, meaningful transfer of knowledge and creation of an agency-enhancing and agency-enabling environment. Trust is a product of a set of 'ideal' conditions, public officials being trustworthy, trading credit slips between water users, having a sense of agency and being able to trust. The ideals of trust present trust as a product of democratic processes and in these ideal conditions trust, as an experience, is reproduced and smoothes relationships. The study expands on the theme of trust by introducing the idea of shame as an inhibitor of trust and examines conditions that activate shame based feelings.

Contents

Chapter One: Thesis rationale and approach to trust and transformation

This chapter introduces the themes of transformation, water and trust, and locates these themes within the broad context of poverty and democracy. The first section of the chapter elaborates on the analytic themes that are used in the study and discusses how the themes were developed for the investigation. The second part of the chapter provides a rationale for the chosen methodology and discusses how the choice of methods contributed to the development of the study. The generalised theory of trust is seated broadly within discourse on democracy but the thesis engages with the construct of trust, within the specific context of transformation from an autocratic to a democratic regime and, in particular, in the water sector. Six themes have been developed that provide a setting for this exploratory journey.

The thesis addresses a number of inter-related questions concerning changed state responsibility for the delivery of water to consumers and how this changed role of the state affects trust relations at the local level. The thesis interrogates present day policy against the historical context of water delivery in South Africa. It poses two questions 1) in what ways does the state maintain strong central powers while relinquishing managerial responsibility for delivery of water and integrated resource management and 2) how the changing state responsibility for this delivery, in particular the devolution of responsibility to local government affects trust between different spheres of government and between government and 'ordinary' water users.

Theorists like Amartya Sen (1999) have argued that human development is a process of enlarging people's choices (Clark 2003). Engaging communities in decision-making processes is not proposed as a replacement for state involvement. Government agents can strongly affect the level and type of social capital that is available to sustainable development efforts (Ostrom 2000, p. 173). The progressive inclusion of various groups into decision-making and management of water matters is provided for in the legislative frameworks that have been put into place by the ANC government and that are necessary scaffolding in the building of South Africa as a democratic nation. The empirical data gathered during the study suggests, however, that government's ability to drive reform and the new systems that have been provided for

to develop democratic water management are insufficient to drive reform in the water sector.

The central task of the study is to test the applicability and relevance of theoretical assumptions about trust and to consider the usefulness of shame as an inhibitor to the building of trust. The task is considered crucial in order to understand the obstacles that exist to achieving the necessary reform in the water sector and in order to ground this understanding within a rigorous theoretical framework that traces the history of ideas of trust, shame and participation.

The chapter is organised under three main sections: 1) introduction, 2) methods and 3) structure of thesis. The introduction stresses the importance of water and the relationship between (i) water deprivation and poverty. It makes the linkage between inclusion and democracy, thus preparing the development, in later chapters, of features of participation and non-participation. (ii) The political context of transformation is then outlined briefly. (iii) Institutions are considered as providing both opportunities and obstacles to reform, and this concern is introduced to the reader in the discussion below. (iv) Thematic schema and (v) the evolution of these themes provide the background for the reader to learn about (vi) the rationale for the study.

The largest portion of the chapter is taken up in elaborating on methods and discussing the limits and advantages of the multi-methods approach that was deemed best suited to the investigation of trust and its usefulness in understanding transformation in the water sector.

1. Introduction

(i) Water and poverty

Communities and living organisms are adapted to and dependent on natural hydrological cycles. Cities throughout the world expand in proportion to their water supply and civilizations have been shaped by rivers, desertification and short-term water abundance in the form of floods. Scarcity of water curtails economic production, food security and health, and in extreme cases can lead to death. Undoubtedly, water is a key constraint to development. Given the historical skews in

service delivery in the past, those who are poor in water are also poor in the human and social capital to claim access to water, despite their constitutional rights to this access. As this inquiry into trust and transformation unfolds, it becomes apparent that those who have an undersupply of water and social resources remain deprived of opportunities to make decisions about the protection, use, development, conservation, management and control of the resource (National Water Act no 36 of 1998). The restriction of opportunities also restricts the production of trust and in some cases reproduces shame.

Democratisation is not only about delivering services but is as Dryzek (1996) and others (Clark 2003; Freire 1972; Kanbur 2002; Minogue 1998; O'Donnell 1994; Ingelhart 1999; Offe 1999; Green 1999; Warren 1999) affirm, about the progressive inclusion of various groups and categories in political life (Dryzek 1996, p. 475).

(ii) The eye of the storm

There is no greater narrative in our country's transition than that of the transformation from a regime of autocracy and domination to a democratic one. The thesis navigates into the 'eye of the storm,' supported by a wide range of theorists whose common interest is to uncover the obstacles and opportunities that make the transformation viable, and in so doing to secure the progressive deepening of South Africa's democracy. The narrative of transition to democracy is intercepted by the story of water. The slogan 'Some for all for ever' reverberates as the Department of Water Affairs and Forestry's (DWAF's) commitment to redressing the inequalities of the past and ensuring a sustainable future. The trajectories of the current transformation in the water sector are also interlocked tightly with global and national permutations in macro-economic policy. South Africa's new status as a democracy propels it into the global neo-liberal regime, a regime that sits uneasily alongside the values so loudly proclaimed in the South African Constitution's Bill of Rights (Act no 108 of 1996).

The Water Law Review Process was formalised in 1998 to pave the way for the legislative scaffolding that was needed to ensure that the anticipated reforms, stating principles that would ensure the transformation from the old to the new, would not remain in the realm of ideas but would become reality. The subsequent movement of

the ANC government away from the spirit of the RDP to the neo-liberal macro-economic Growth and Redistribution Policy (GEAR) does not make the difficult task of making the 'spirit of the law' a reality any easier. Tensions between water as a public good and water as an economic good, precarious linkages between two core binding policies, the National Water Act (no 36 of 1998) and the Water Services Act (no 108 of 1997) and between hasty outcomes and long-term sustainable delivery are acute.

Policy that underpins reform in the water sector is unequivocal in its support for participation and inclusion of all stakeholders, and makes specific reference to those water users who were disenfranchised and excluded from decision-making processes under the past regime. DWAF (2003) claims 'Transformation is one of the mechanisms to achieve equity' (2003, p. 32).

(iii) Institutional opportunities and obstacles

Within the development context, the focus on civil society and inclusivity is not on individual rights but is rather on shared solidarity (Seligman 1997). The concept of belonging is at the core of theoretical discourse known as social capital. Trust is an attitudinal or cognitive component of social capital. It appears that those who have learnt to trust one another have understood that the benefits of co-operation are worth the transaction costs. These abstract theories advanced by theorists are explored in the study and although those who trust are more eloquent in the newly constructed water management systems, there is also reason to believe that they have more to gain by co-operating with one another.

In the ideal, institutions, committees, forums can have positive effects and have the potential to further the project of democracy. They can too, it has been suggested in theory, help provide adequate, accurate information that allows people to make appropriate, efficient decisions (Serageldin & Grootaert 2000, p. 48). In the view of Levi (1996) institutions have the potential to break the vicious cycles of discrimination (1996, p. 48), thus laying the basis for what Levi (1996) and Uslaner (1999) call generalized trust. According to Offe (1999) institutions could offer a 'deceptively simple and easy way out of the structural scarcity of trust in all its dimensions' (1999, p. 65). The study

examines the convergence of these ideals with the reality as it unfolds in the water sector.

(iv) Trust and social uncertainty

The study examines the usefulness of trust as a measure of the social climate of reform. Within the context of South African citizens' experience of degradation, exclusion and heightened in-group/out-group dynamics, suggests that shame might be an inhibitor of trust. Shame sits well, the thesis argues, within the same analytic framework of trust and social capital.

The reconstruction of the new and deconstruction of the old is a risky process, and one of the problems that seems to be emerging is that too many assumptions about how the process should unfold curtail innovation, inhibit exchanges and close networks instead of opening them. On the one hand there are fears that too much deliberation and insistence on old issues of exclusion and so forth are costly, time-consuming and obstructive to the implementation of prescribed policies. On the other hand, as the study suggests, pressing ahead and 'getting a move on' without adequately examining the uncertainties, resulting in what Kramer (2001) calls 'uneasy trust,' is costly. Ten years into the democracy, a symposium organised by DWAF to examine water management institutions is a sign that DWAF itself has recognised the need to re-examine the process that they have set in motion. Repetitive utterances by DWAF officials such as: 'there are no blueprints' or 'this is process' and 'we are all learning' and again 'we need to understand why ten years into the democracy it is so slow' suggest that failed attempts to control anticipated outcomes have had the positive, but costly, effect of reconsidering ways forward.[1]

(v) Thematic schema

One of the core challenges facing DWAF in the task of transformation is the trade-off between rapid initial delivery on the one hand and greater levels of investment in social development and capacity-building on the other (DWAF 2001a, p. 14). The thesis proposes that these unresolved tensions affect trust between water users. The

[1] The Director-General's words during the opening speech at the Water Management Institutions Symposium, 15 – 16 April 2004, Willow Park Conference Centre, were that this is a 'world beating job with limited resources.'

study scrutinises the relationship between trust and transformation in the water sector deploying six analytic variables to organise this task: 1) style of government, 2) synergy between state and non-state actors, 3) bureaucrats and change, 4) knowledge, 5) power, 6) agency. The rationale behind the research is to critically examine the relationship of these features and the development of trust. As trust is a core construct of social capital, the attitudinal as opposed to the structural component, social capital is considered as a critical theoretical construct and is a leitmotiv underpinning the analytic structure of this study. Although firmly lodged within the theoretical construct of trust and social capital, the deployment of six themes makes the inquiry, into the complex social processes, coherent. In this way the social permutations that are part of the reform in the water sector and that are nested within the debate on trust, are visited and revisited during the course of the investigation.

(vi) Rationale for study

Values put forward by social scientists sit more or less comfortably alongside actual data. As the study takes its course, there is no doubt that trust, as argued by the theorists, is a critical component of democracy, but the empirical data suggests that the complex arena in which transformation in the water sector unfolds is difficult to explain in terms of trust theory alone. Trust is a product of a set of 'ideal' conditions and it is constantly reconstructed, renegotiated and reinstated. In order to better understand the politics of trust and social uncertainty, a wider set of analytic tools is necessary. Trust is both fickle and faithful, fluid and flexible and is a mellifluous but not sufficiently robust tool with which to consider the way in which the landscapes of water are reconfigured. Nonetheless, the variances between high trust and low trust serve as a useful barometer with which to test the climate of reform and to evaluate the progress of the democratic project.

The scaffolding for trust is constructed within the broad set of analytic themes that have been identified above and are reiterated here: (i) style of government which considers ways in which a top-down or interventionist style might affect the development of trust (and perpetuate feelings of shame), (ii) ways in which bureaucrats accept or resist change and why these might influence trust, (iii) ability of non-state and state actors to develop synergistic relationships and what factors influence the shape of these relationships. The three themes of knowledge, power and

agency are closely linked: (iv) equalising of power and the way in which power relationships are maintained or undermined, (v) meaningful transfer of knowledge and (vi) creation of an agency-enhancing and agency-enabling environment.

The task of the study is to examine the substance or stuff with which the scaffolding is being secured. In so doing it 1) advances the theoretical framework of trust and secures trust as an important topic of concern in the reform process in the water sector and 2) explores another attitudinal construct that fits tightly alongside trust, the construct of shame. The discussion that is pursued examines the likelihood of the theoretical construct of shame resonating with social capital discourse, more specifically with its attitudinal component, trust. The relevance of the construct of shame in understanding non-participation, withdrawal, silence and symptoms of inequality and exclusion that persist is thus pursued. By bringing shame to the forecourt of academic discourse, within the well established and accepted social capital framework, understandings of shame are repositioned from a murky underworld of irrational emotion into the realm of cognitive and rational choice 'modernity.' It seeks in so doing to bring together the realm of the emotional and rational because, as Gran (2001) notes, modern society tries to establish 'the separation in social reality, at a cost' (2001, p. 7). 3) The study advances understanding of local development in general, but in particular the notion of development at the level of a catchment area, and 4) in the scrutiny of trust, the thesis brings together disparate disciplines and their incumbent theoretical constructs.

2. Methods

The methods section is divided into six phases that interlock with one another. Multiple methods is recognised as a common approach to secure in-depth understanding of a research topic. Because of the recognised difficulty of achieving objective reality, both in quantitative and qualitative research methods, the multiple methods focus attempts to 'secure an in-depth understanding of the phenomenon in question' (Denzin & Lincoln 1998, p. 4). This approach is also referred to as triangulation, and can be considered as an alternative method of validation (Denzin 1989; Fielding & Fielding 1986; Flick 1992 in Denzin & Lincoln 1998, p. 4). In this method, the investigation uses a number of qualitative research methods and reflects the need for qualitative research to be subjected to the same rigours as quantitative

research. In other words, in adopting triangulation as a method of validation the qualitative research is subjected to a degree of rigour that is commonly accepted in quantitative research methods.

Denzin & Lincoln (1998) use the term 'bricoleur,' and although it can have a pejorative meaning, implying, for instance, an amateur, Denzin & Lincoln (1998) use it to describe the agility of the researcher who is able to 'perform a large number of diverse tasks' (1998, p. 4) in order to achieve rigour and breadth in the study, deploying a qualitative research methodology. The table below illustrates the phases and multi-methods approach.

Table One: Multi-methods approach

Time period	Phase	Type of activity	Details
November 2000 – Februrary 2003	1	Admin Africa project	Desk-top: literature review on social capital, governance, democracy, modernity: included interactive dialogue, discussion groups, critical analysis (20 scholars)
March 2002 – March 2004	2	Theoretical pursuit on related topics: public policy, public administration, organisational theory, social identity, participation, methods	Literature readings of books, journals, papers from colleagues: analysis and theorizing of concepts. Complementary work where gaps in social capital literature and empirical data called for further definition of an analytic frame
December 2000 – March 2004	3	Sector specific research, projects and water policy review	Legislation, Water Policy, Guidelines, Water Research Commission, Water Sector general. Relationship between neo-liberal macro-economic policy and service delivery, with particular reference to the water sector
February – September 2001 January – February 2004	4	Breede-Overberg stakeholders face-to-face interviews*	Semi-structured and unstructured interviews (interviews): 12 town engineers and public officials, 9 commercial farmers, 12 consultants, 15 DWAF and non-DWAF policy makers, 5 councillors,
November 2000 – November 2003	5	Formal events, interaction with Breede-Overberg stakeholders	Direct observation: 1) catchment fora, 2) Breede Stakeholder Forum, 3) Overberg Stakeholder Forum, 4) Breede-Overberg Stakeholder Forum, 5) Breede-Overberg Reference Group (10 meetings)
August 2001 – May 2004	6	International and national workshops, conferences	1) International Water History Association: Bergen Conference: 2) Social Capital/ Community Empowerment/Participation workshop: World Bank Washington, 3) WISA Water Conference 4) Water Management Institutions Symposium

See Appendix Three for interview schedule

Phase One: Project Admin Africa: The administrative authority and trust relations between state and society in South Africa. Democratisation and Professionalisation of Administration within Agriculture, Education/Science and Health.

The thesis is grounded in a broader explorative research project on trust and its role in public administration in the spheres of local and national government, housing, land, health services, tax collection, education and water. The Admin Africa project was a collaborative effort between the School of Government at the University of the Western Cape, South Africa, and the Department of Administration and Organisation Theory at the University of Bergen, Norway. The project was funded by the Norwegian Council for Higher Education's Programme for Development Research and Education (NUFU).

The ability to acquire knowledge in both domains has been posited by Vroom (2002) as a feature of development. Scrutiny of the effect of opposing knowledge regimes became an actual research experience as researchers from the third world developing context (South Africa) and the first world context (Norway) collaborated and shared ideas and experience. Conflicts, insecurities and issues of power and knowledge played themselves out in the early months of the three-year Admin Africa project. But through the common project of acquiring knowledge across domains there was co-operation and there were positive outcomes for the project. The project included six doctoral students who were supported and encouraged in their pursuit of excellence, fumbling, crawling and stumbling but gaining confidence with every step. Trust was the outcome of bridging differences and pursuing common interests.

The primary gains were in advancing discourse on trust and bringing the international concerns about trust into the domain of public administration in post-apartheid South Africa. Secondary gains were in establishing a network of friends, scholars and researchers who are able today to interact and to share opportunities and knowledge. Admin Africa demonstrated that the investment of energy, resources and time had positive gains. At the individual level, acquiring knowledge and learning the values of critique in the spirit of learning and for the achievement of academic excellence has proved invaluable. At the institutional level, linkages have been forged between the University of Bergen, Department of Administration and Organisation Theory, and

the University of the Western Cape, School of Government, and the University of Cape Town's Department of Political Studies with anticipated future exchanges of scholars and ideas between developed and developing countries.

The first year of the project involved a critical review and synthesis of important social capital literature. In the initial phase of the project, some project members were concerned that the international discourse on trust could not contribute to decoding events unfolding within a developing country context. Some scholars in the Admin Africa project placed importance on distinguishing between modernity and pre-modernity, with the assumption that trust fitted with values that were modern rather than pre-modern. Others contested that trust had any value at all in deciphering democratic values, within either developing or developed country contexts, and argued that the notion was too vague to be useful.

The trust debates that emerged were vigorous and the dissent voracious. For many, particularly those from South Africa, social capital was a new and contested construct. Yet the trust literature spans disciplines, and each in turn settled into ways of grappling with the analytic framework that were personal yet collective, shackled yet unbounded, conflictual yet convergent. In the process, it became evident that trust was important and that the construct merited further critical analysis in order to determine whether and in what ways it could be rendered coherent and relevant to South Africa. The research project on water is strongly embedded in the Admin Africa project. The proposal submitted in its earliest phase aimed to use trust as a tool for better understanding the gap between policy and its practice in water resource management.

Phase Two: Theoretical pursuit in related topics:

Evolution of thematic schema

The progressive uncovering of related literature constituted phase two. The key words trust and transformation are more or less explicit in literature in the field of organisational theory, for instance, Powell & Dimaggio (1991), Ostrom (1996), Levi (1996), Agrawal & Gibson (1999) Selznick (1949) and North (1990) consider institutional and systems change and the effects of these changes on actors. Kickert *et al.*'s (1999) insights into managing complex networks and his experience of strategies for the public sector were enhanced by Kramer (2001) who examined organisations

from the perspective of social identity, elaborating on social uncertainty and 'uneasy' trust. The development of the themes of Ostrom (1996), Levi (1996), Evans (1996) and also Rueschemeyer *et al.* (1992) around synergy and style of government are tightly locked, implicitly or explicitly, into social capital discourse.

In scrutinising the notions of synergy and style of government, the work of Coning (2000) on the nature and role of public officials and Cameron (1999), who critically examines the effects of policy reform on local government, provided an important national context on these global themes. Lowndes (2003) and Carmichael & Midwinter (2003) were helpful, on the other hand, in locating the local government debate within a broad global context. It became apparent in examining this literature that the similarities between developing and developed countries are as important as the distinctions between them. Similarities were useful in ordering what would otherwise appear to be 'chaos' in local government. Balogun (1989) and Mutahaba (1989) were particularly helpful in locating transformation as an historical event and in so doing interpreting the problems of centralisation and state control in Africa as an imperialist project. The work of Balogun & Mutahaba (1989) resonates with Marais's (1999) interpretation of control and authority within the South African context. Marais's (1999) caution about the intended limits of change that appease 'friend and foe' enlightens this research, offering insights into the paradoxes inherent in the water sector.

Finally, the literature on participation that touches centrally on the themes of power, knowledge, agency and patterns of inclusion and exclusion reverberates with the analytic themes above. Unpacking problems that are of central concern to Newman *et al.* (2004), Williams (2004), Fergusson (2004) or Briggs and Sharp (2004) provides strong evidence of the way in which knowledge, power and agency intercept with the production of trust or the perpetuation of shame.

Phase Three: Sector-specific research projects and policy review

The historical review of the nation's water resources, a challenging task for the first ANC government, was undertaken by the newly formed Department of Water Affairs and Forestry (DWAF) in 1996. The Water Law Review Process, chaired by Geoff Budlender, was a formal review that led to the promulgation of the National Water

Act no 36 of 1998. A large volume of guideline documents were commissioned by the Department. These included documents on catchment management fora, guidelines for the transformation of irrigation boards into water user associations, public participation processes and formulae for establishing committees, reference groups and other management systems to take over the protection, use, development, conservation and management of the resource. These documents were made available for the research project[2] and were a valuable part of the scoping that was necessary in the early stages of the thesis.

The production and use of documents is, as Walsh (2004) contends, a valuable resource for ethnographic study (2004, p. 235). Consultants who were responsible for organising the catchment management processes that developed in the Breede-Overberg Water Management Area, the selected site for the investigation, were asked by DWAF to advance notice of all meetings and relevant documentation in the interest of the research. However, despite the availability of these important guidelines and information, they are largely developed by consultants and researchers who have been commissioned by DWAF. In addition, the documents are designed for technically literate participants who are part of the water management systems. In these documents there are concise and accurate renderings on hard data, such as water flows, technical breakdown of water usage and so forth. The documents provide almost no critical analysis or reflection on process. Scholarly work, produced independently of the DWAF, was of critical importance in filling these gaps, in particular Wester *et al.* (2003), Mackay (2003) and Fayssee (2003). The Water Research Commission (WRC) is committed to inquiry into social processes, and notable in this field is the "Critical Review of Current Participatory Practice in Integrated Water Resource Management", WRC Project No K5/1434.[3] The emerging patterns of participation or non-participation are confirmed by Wester *et al.* (2003), Mackay (2003) and Faysee (2003), and indicate the critical importance of further case-specific investigation and scrutiny of the reform process.

[2] Acknowledgements to Rashied Khan, Willie Enright of the Department of Water Affairs and Forestry and to Louis Bruwer, consultant.
[3] Acknowledgement to Jane Burt for making available this work in progress.

Indications from discussions with knowledgeable researchers in the field of social science and development studies confirm that the patterns emerging in the water sector are neither surprising nor anomalous with research evidence in other sectors. The accuracy and 'scientific' value of this work thus contributes to more general concerns that are currently being articulated by a wide range of scholars across a number of disciplines. Nonetheless, the study site is a single WMA – comprised of a number of settings. This strength has also been identified as a weakness because there is a lack of generalizability (Maxwell in Bickman & Rogers 1998).[4] The particular setting, the Breede-Overberg Water Management Area, may well be an extreme case or type for several reasons and is not, therefore, necessarily representative of the larger CMA population.[5]

Walsh (in Seale 2004) proposes that other documents, of a literate society are also useful tools for the ethnographer (2004, p. 234). Novels such as Robert Harris's *Pompeii*, Diane Raines Ward's *Water Wars*, Drought, *Flood, Folly and the Politics of Thirst*, Morton's *The Water's of Rome*, Reisener's classic *Cadillac Desert*, Suzanne van Rensburg *Soet Anysberg* or Langenhoven's *Die Kys abaut die Forro*, are among some of the narratives that paint the world of water in words, poetry, descriptions, emotions and meaning. This literature provided inspiring and compelling visions into the world of water, 'invisible' beacons on the backstage.

Phase Four: interactive formal events (DWAF and other)

Four important conference and workshop settings offered the opportunity to consult, interrogate and exchange ideas, locating the research within a broad national and international setting

1) 'The role of water in history and development' The Second International Water History Association Conference held in Bergen 10-12 August 2001

[4] In Survey Research Techniques: 54th Summer Institute, Ann Arbor, Michigan. Riley: Qualitative Methods: Semi-Structured Interviewing.

[5] The Western Cape, until the recent elections in 2004, was governed since 1994 by the Nationalist Party. The province is also the wealthiest of the nine provinces.

2) 'Conceptual and operational links between empowerment, social capital and community-driven development' Seminar held at the World Bank, Washington, D.C., in October 2003[6]
3) 'The Water Institute of South Africa (WISA) biennial conference' held at the Cape Town International Convention Centre, 2-6 May 2004
4) 'Water Management Institutions Symposium' April 2004. Willow Park Conference Centre

These events provided a platform for active involvement, dissemination of papers and uninterrupted immersion in water matters with fellow colleagues at a localised, national and international level. The International Water History Association hosted a three-day conference in Bergen that brought together a wide range of scholars exploring themes of water and development as lawyers, anthropologists, historians, artists, political scientists and technicians. Of special interest was the shared research experience of water management systems in developing contexts, in particular exposure to water scarcity in the Middle East, Africa and Latin America and conceptions of water within an historical and developing context. The first event presented an opportunity to explore more deeply current thinking on the relationship between social capital, empowerment and community-driven development. The three events brought together scholars with common interests in water and confirmed that this study on water, lodged within discourse on trust and social capital, is important.

The seminar at the World Bank in October 2003 provided international perspectives on core development themes and in debating the conceptual and operational links between empowerment, social capital and community-driven development a number of prominent scholars, in particular Grootaert and Krishna's 'think pieces,' were debated and elaborated on in some detail. The significance of the event, within the context of this thesis is that the scholarly reflections emphasised the critical role of the state in creating a climate where trust is nurtured and emphasised experiences of trust in developing contexts. The seminar confirmed the usefulness and limits of the concept of social capital, in particular its cognitive component, trust. Implicit in the

[6] Included think-pieces commissioned by the World Bank on conceptual definitions, conceptual linkages, major points of agreement, major points of divergence and key operational points by Esman, Grootaert, Krishna and Poteete.

debates, was also the notion of shame, because scholars spoke about the way in which knowledge was transferred and how people felt ridiculous or embarrassed when they could not understand what was being said.

The WISA biennial conference in May 2004 came at a critical time in the preparation of the thesis. The data collection was complete but the opportunity to discuss water resource management and to contextualise this aspect of water reform in community driven projects, municipal projects and so forth was valuable. The themes that have been elaborated on in the thesis were latent in much of the work presented in the context of community-driven development or integrated water resource management, highlighting the relevance of this study and its contribution to research and inquiry into challenges that face DWAF in forwarding its project of reform.

The Water Management Institutions Symposium was a two day intensive workshop. Discussion in small breakaway groups with key decision makers in the project of integrated water resource management highlighted some of the problems that have been identified and how DWAF perceived and managed these. The symposium was a planning symposium where the decision to restructure the Department and develop proto-CMAs within the Department, was confirmed.

Phases Five and Six: Qualitative versus quantitative

Introductory words

The objective of gathering empirical data is to provide real data with which to evaluate the relevance of ideal theoretical assumptions that have been developed into theoretical constructs, or what Maxwell (in Bickman & Rogers 1998) refers to as a 'test' of the developing theories (1998, p. 94). The task of this research project is to evaluate the usefulness of the ideas, emanating from the selected theoretical schema, in analyzing the transformation that is taking place in the water sector in post-apartheid South Africa. The data provides an opportunity to deconstruct features of the trust discourse that are most useful for this project.

The first challenge in data collection is to source primary and valid structures that provide coherence to the narrative and in so doing advance the inquisitive impulses of the research by rendering coherent the relationship between the theoretical constructs

and the words uttered by key informants. Both quantitative and qualitative research methodologies offer the potential for both rigour and error, but this study is not tasked with examining, in too much detail, the comparative strengths and weaknesses of both. Adequate cautionary measures are required to mitigate for bias in both approaches.

Research as a process of trust

As a numerate anthropologist,[7] versed in qualitative research methodology, the temptation to produce a robust measuring instrument for trust was overwhelming. The constant self-undermining of the authority of the qualitative versus the quantitative needed curbing, as it was a symptom of the need for acceptance by technicians and 'serious' researchers in the domain of water. The production of a scale would provide a 'safe' measure for trust. A quantitative study on trust in the water sector would have therefore provided easier points of entry and exit into the domain of water, as the method echoes the pragmatist 'technical' and 'objective' ethos that predominates. Another temptation was to reduce the need for face-to-face unstructured or semi-structured interviews. In other words, it was an impulse by the researcher to check the emotional against the rational, the feeling against the cognitive and the 'soft' against the 'hard' science.

The nagging desire to produce a robust measuring instrument was only fully placated during the final stages of the research project. Four events appeased the quest for quantitative research: 1) the complexity of the terrain and recognition of the limits of quantitative standardised instruments in measuring shifting and uncertain social phenomena, 2) external supervisory reassurance that the existing empirical evidence is more than adequate and that, furthermore, a scale to measure trust could be both distracting, costly and possibly unreliable,[8] 3) convergence of the cognitive and

[7] As an anthropologist in the Southern Africa Labour and Development Research Unit (SALDRU) at the School of Economics (UCT) and part of a network of individuals pursuing common interests, knowledge and confidence about poverty research, both quantitative and qualitative, was gained. Later as a development practioner with a keen focus on informal networks and their role in economic production, entrepreneurship and capacity-building, the focus was on creating accurate and valid measuring instruments and exploring mixed methodologies. Large- and small-scale surveys included questionnaire design, field supervision, validation and monitoring, data analysis and synthesis of these large- and small-scale surveys during the period 1990 to 2002.

[8] This project will be pursued as a discrete project post-doctoral thesis. The thesis is a contribution to further thinking and development of a valid measuring instrument.

emotional through bringing to fruition this project/thesis and thus gaining an internal authority (self) that is better able to resist the temptation to undermine the 'softer' aspects of social science, 4) trust in the research process and in the cohabitation of academic reasoning and excellence and emotional feelings. This cohabitation and ability to mingle the rational and emotional mitigated any tendency for reinforcing shame based feelings. The thesis provided an enabling environment for the development of agency (self) and permitted both the penetration of trustworthiness of others and of being trustworthy for others.

The difficulty of measure for intangible assets

Qualitative research has been criticised for not being 'scientific' although practioners of quantitative research are more frequently bringing qualitative components into their research design (Grootaert & van Bastelaer 2002; Seale 2002). Research into intangible assets, such as trust and social processes, the focus of this study, are prey to a range of problems that are common to *both* quantitative and qualitative research methods.

The concept of social capital is very popular in development discourse but it is relatively under-measured.[9] There is insufficient attention paid to tool design which focuses on relevant factors in social capital. The nature of the concept, too, and its significance across almost all aspects of life, demands that a multi-disciplinary approach be used. But there are several other challenges associated with measuring the construct of social capital.

A first challenge presented is for instrument design and the effort – in social capital measurement – to measure 'invisible goods.' Differences in meaning exist for different people and a methodological challenge is evident in efforts to create measures that actually tap into what they are supposed to – or claim to – be measuring. Another challenge, associated in particular with the creation of a standardized measure of intangible or invisible assets, is the need to distinguish

[9] Narayan's *Voices of the Poor, Poverty and Social Capital in Tanzania* produced by the World Bank in 1997 provides quantifiable evidence of social capital at the village level although its emphasis was on the structural rather than the attitudinal component of the construct. The attitudinal component is more prevalent in democracy measures such as the Afrobarometer, Latino or Eurobarometer and the World Values Surveys.

between beliefs, attitudes and behaviour but to measure all three. One needs to ideally be tapping into all of these, but typically some surveys focus only on one of these important elements. In the task of measuring social capital it is essential that deep structure beliefs are used that inform behaviour as much the measure of the behaviour itself. [10]

A further challenge is to develop robust instruments which can measure across cohorts (i.e. income, education, race and age) and across location, a daunting feat in the domain of water management where cohorts are disaggregated into cultural, political and type of expertise. This is critically important in measuring social capital because these measurements can, if accurate, be used as predictors of, for example, trends in social wellbeing or social uncertainty, inclusion/exclusion, willingness to pay, to co-operate or to engage with the subject of integrated water resource management at all. But the challenge remains of how to interpret the causal linkages between trust (risk-taking, inclusion, engagement), shame-related behaviour (withdrawal, exclusion) and participation (inclusion, agency) and so forth. This is not an incidental task and requires considerable expertise in new paradigm research methodologies, whether these are quantitative or qualitative.

In the domain of quantitative research, there are important debates around construct validity and reliability that inform trust measurements, in particular those put forward by Adcock & Collier (2001) who distinguish not only between validity and reliability but also between different types of validation processes. These authors provide a good illustrated model of conceptualisation and measuring: levels and tasks. The importance of this work is that it allows for different types of validation and makes use of an integrated overall process of assessment. The use of 'nomological validation' (Adcock & Collier 2001, p. 530) allows for the examination of the causal relationship between specific indicators of different concepts. But the usefulness of this research is also its reference to bridging differences, rather than stating distinctions, between qualitative and quantitative research methodologies.

[10] See Grootaert & van Bastelaer (2002) for additional information on understanding and measuring social capital.

Onyx and Bullen (1997) in their analysis of CACOM, the Centre for Australian Community Organisation and Management's social capital data project, point out that the social capital and cohesion scale they developed was simplistic and as such could not deal with the complexities and subtleties of human life (1997, p. 26).

Other common errors in survey research, that are not specific only to the measure of intangible assets, include respondent and interviewer fatigue; 'recency and primacy'; hypothetical questions; 'memory recall' and 'satisficing' (Krosnick 2000; Sudman *et al.* 1996), many of which interfere with validity measures not only in quantitative but also qualitative research methods. Joseph Maxwell (in Bickman & Rog 1998), in his analysis of validity, identifies two broad types of threats to validity: researcher bias and reactivity, which is the researcher's effect on the setting or respondent, both of which are discussed in more depth in discussions that follow (1998, p.91).

The advantage that quantitative research has over qualitative in this domain is the potential for larger numbers that produce data for statistical analysis. Quantitative research is also able to test whether the emerging trends in this study are changing over time, whether the measured trends are localised events and to identify new indicators and test others during the data analysis phase. But *both* quantitative and qualitative research are prey to a host of design problems and data errors, including the subjective design of the researcher and which questions are asked and which not. These remarks are critical when undertaking research about intangible assets and any assumption that qualitative research is less authoritative than quantitative in this respect must be rejected.

Participant observation and interview process

Introductory remarks

Participant observation, unstructured and semi-structured face-to-face interviews were used in this research project for the purpose of gathering raw data. The study is exploratory in nature and the data is neither controlled nor manipulated (Tashakkor & Teddlie 1998, pp. 37-38). The process itself informs the finished product.

Participant observation

This ethnographic component of the study was interactive and provided rich and important data to further the inquiry into trust and transformation in the water sector. Anthropologists have taken the view that society can be studied best from inside by the immersion of the researcher in the study. Walsh (in Seale 2004) presents an argument that ethno-methodology is part of a constructionist approach and it encourages the researcher to focus not so much on how people see things but what they are doing (2004, p. 227). A realist and 'scientific' view of the world is optimal, even if this is guided by feeling, perception and qualitative research methods. According to theories on reflexivity (Janet Holland and Caroline Ramazanoglu (in Seale 2004), the subject's own filter amplifies some events and mutes others. As the study field was remote from personal experience, highly technical, male and organised predominantly by engineers, the critical inquiry was made easier on the one hand, for it was necessary to act with suspended disbelief. In this instance the researcher's own ignorance of anticipated outcomes worked to the advantage of the critical inquiry.

Geertz (1973) sees culture as a system of signs, and for him the task of the ethnographer is to produce 'thick description.' The ethnographer is then able to find a whole web of meaning, cultural structures and knowledge which is superimposed on what he calls the layers of a cultural script (in Seale 2004, p. 227). Walsh (2004) suggests that being a story-teller and conveying arguments and persuading readers that their accounts are 'plausible constructions of social actors and social scenes' (2004, p. 228) is a lesser science. Truer science does not need to persuade the reader that the accounts are 'plausible' for if the utterances of social actors are 'facts' and 'real' then forms of realism have not been abandoned and the renderings are truly empirical and 'scientific' in their exactitude, despite the filtering effect of the researcher.

The onus on the good researcher is to constantly re-evaluate the 'facts' and reconsider fairness, correcting for the effects of the filter where possible. Although the interview is, as Steinar Kvale (2003) writes, subjective, bias is reduced by the 'craftsmanship of the researcher' and it requires ongoing cross-checks and self-verification to ensure

that the knowledge that is generated remains as valid and reliable as possible (2003, p. 290). This process was an iterative and essential ingredient in the study.

As a participant observer (deploying direct observation techniques), Walsh (2004) recommends good relationships should be established with the people that are able to generate the data needed (2004, p. 228), but this is an ideal recommendation because in effect the gaps in knowledge, feelings of social uncertainty and 'uneasy trust' (2001) inhibit data-collection procedures. More than once during this study, for instance, conversations were redirected by either the respondent or interviewer. Instead of speaking about licensing or about the ethics of weighted votings in water-users' associations, the conversation turned to non-threatening topics – for respondent and interviewer – such as the food that was served at the venue or 'another cup of tea?' Efforts to redirect the interview and to regain authority were sometimes unsuccessful.

The data of a technical nature that was most needed in the early stages was most inaccessible – inhibited by the knowledge regime of the researcher who did not have the key to enter into an unknown territory. Inexperience in the 'scientific' realm also inhibited information flows because once the door was unlocked and information flows were forthcoming, the information itself was often difficult to grasp. There was considerable cognitive dissonance between respondent and interviewer on many occasions. Thus the problem was not, as researchers sometimes experience, external gatekeepers who restricted access to information. The gates were open because the research was, at least formally, legitimate, emanating from a renowned learning institute and encouraged by DWAF within its own ethos of critical inquiry. Gate-keeping was self-inflicted and stringently inhibiting.

Dissonance between the formal acknowledgement of the research and the pressing need for results – 'so what have you found?' – was also inhibiting. Although the gates were opened there was, nonetheless, dissonance between the 'technical' and the 'social.' The 'technical' found difficulty with a quest for 'truth' that was not positivist but doubtful, was reliable but ambivalent and was realistic yet incongruous. The convergence between engineer and social scientist reinforced that the social scientist

repetitively reproduces perplexing verisimilitude and reflects back social uncertainties and ambivalences that go with deep change.

Walsh's (in Seale 2004) reference to the funnel structure of ethnography matches well with the actual research experience. The research did not have a distinct point of departure, other than the investigation of trust in the water sector, but as the ideas were more clearly formulated, the problem to be investigated gained focus. The original 'plan' mooted over time for the initial idea to scrutinise two institutional settings, 1) the catchment management agency and 2) a water-user association, was both erroneous and impractical. The catchment management agency did not yet exist and the **process** of its establishment became the most important focus of the research. The process of gathering raw data as part of the investigation of trust and transformation in the water sector unfolded in a number of interviews, meetings, venues and institutional sites.

The duration of meetings for this component of the study varied between four to six hours. The advantage of this component of the study was that there were well prepared formal documents[11] provided by consultants both pre and post-meeting and these provided valuable information both during the data-gathering and analysis phases of the project.

Face-to-face interviews

Face-to-face interviews were both unstructured and semi-structured with the duration times between 90 and 120 minutes.[12] Verbal protocol between respondent and interviewer was sometimes complemented by maps of the geographical landscapes of the Breede-Overberg Water Management Area no 18, which was, as indicated in the preface, the chosen site of investigation for the thesis. The advantage of using maps as a tool to advance the inquiry was that the mapping of the geographical setting

[11] Note reservation on objectivity and range of topics highlighted in elaboration of phase three above.

[12] In writing, the intention is to provide a disguise and protect the identity of the informant, but this has not always been possible. Names and places have been changed to make it difficult for key informants to recognise themselves or to be recognised by the reader. For instance, an interview in Onrus might be listed as an interview in Hermanus, in this way maintaining the integrity of the geographical region but cloaking the respondent in a false identity. Unfortunately it is not necessary to adjust for gender as there was a jarring absence of women water users in the meetings.

spatially identified boundaries of mountain, borders, estuaries, rivers and other physical landmarks. But there were disadvantages to this investigatory tool, for example the ease – and speed – with which the respondent navigated through the maps reinforced feelings of separateness, ignorance and 'stupidity,' undermining the research confidence.

Coherence

The internal coherence of the findings suggests the emergence of a general experiential pattern of the events. The researcher's awareness of the need for coherence is itself an error bias in that selective utterances, during both the participant observation and the face-to-face semi-structured and unstructured interview phases, might be recorded over and above other utterances. Nonetheless, the experience of research and the need to retain integrity and internal validity is, as an anthropologist and development practioner, engrained. Thus the internal subjective analytic voice constantly corrects for bias by ensuring that words that 'don't fit' are not excluded. The words that 'don't fit' contribute to the puzzling distortions that are part of the transformation process and confirm the complexities and shambolic meanings that emerge on the ground at this particular point in post-apartheid South Africa.

Face-to-face interviews provided raw data in the form of narrative texts. The data that was collected was transcribed within hours of the interview and a method of open coding was used where phrases or key words are coded using theoretical themes to organise the texts. This is adjusted from what is known as grounded methodology. Grounded methodology generates an indexing system through which segments of raw data can be accessed more readily (Henwood & Pidgeon, 2003, p. 139).[13] An example of open coding follows:

Table Two: coding example one: Interview Onrus Steering Committee. February 2001

Key Word	Example of manifestation
Distrust	Farmers very distrustful and won't co-operate re registration: also distrust re the pricing system
Not real opportunity	People feel that locals don't really get to make any decisions
Opportunities	New opportunities would be welcomed
National versus local	Not real local involvement in the bigger picture, it's all them
Inclusion/exclusion also interventionist style	DWAF going ahead with plan without input from any of us

[13] See also Seale (2004): Generating grounded theory (2004, pp. 240-246).

Table Three: coding example two: Interview Central Breede River WUA: February 2001

Key Word	Example of manifestation
Trustworthiness	He has been elected to represent all WUA
Man of knowledge	Knowledge of aspects of water consumption, etc
Historical elite	Connected to Brandvlei Dam building
Key player	At all meetings, leading part, part of the inner circle
Language (my perception)	Impenetrable: makes decisions and leads

The surprising ease of verbal protocol of many of the respondents meant that unstructured interviews allowed for free flow of speech and the emergence of the invisible threads of trust and shame. At times the resonance of the theoretical constructs in the language of the respondent was thrilling in the exactness of match between the ideal and the real. In indexing the narratives, patterns emerged: style of government matched experiences of inclusion and exclusion, trustworthiness and reflections of high or low trust and poverty, and water scarcity produced common themes in which the devastating effects of apartheid and the cleavages that exist currently were blatant.

Unintended consequences of coding

The open coding method proved indispensable when shifting through large amounts of text at later stages. The text is, however, preserved in its original form, and as the theoretical frame itself expanded, new themes emerged. For example, after several interviews with town engineers local government issues were repeatedly reproducing resounding themes that did not readily match the social capital indexing or coding. New reading in public policy and public administration was helpful in providing the linkage between the theme of social capital, for example Sztompka's (1997) style of government and Mutahaba's *et al.* (1993) themes of centralisation in Africa.

Some of the findings were fobbed off as incoherent by some 'experts,' but they have been included as the fobbing off of certain realities can be perceived as censoring or gate-keeping and is in itself an indicator of the uncomfortable exactitude of the data, rather than the reverse. The fobbing off was important as it necessitated repositioning and cross-validation, both from 'objective outsider voices' or 'objective internal voices.'

Sample and sample bias

Gaining access to respondents was unproblematic and recruitment of respondents snowballed with ease. The sample approach was purposeful and individuals were

selected for suitability to 'test' the theory. The difficulty was not the recruitment phase but the face-to-face interviews themselves, because of exaggerated bias such as male respondent/female interviewer, water expert/water layperson, practical farmer/academic researcher, which were at times overwhelming. Some respondents perceived the researcher as lacking in practical skills because academics were considered to be 'out of touch and in the realm of ideas. ' In other instances the prejudice was that a layperson would 'never really understand' and a female interviewer reinforced the 'otherness' and 'differences' (Fine 1998, pp. 133-135).

Over-reliance on 'experts' who were recommended in the early phases of the research had some negative repercussions as this reinforced the researcher's own feelings of inadequacy. Embarrassment or feelings of inadequacy meant that opportunities to gain knowledge were often lost. These opportunities were lost because the information overload was overwhelming and the inexperience of how to retrieve the events and organise them in memory reinforced feelings of exclusion and being 'stupid' or 'inadequate.' Much of this early data, retrieved two years later, served to inform the study. Its usefulness was not maximised at the important early stages of the study, and instead of providing stepping-stones to direct and focus the inquiry, these early meetings had a contrary negative effect for they were stored in memory as a reminder of the researcher's own ineptness and lacunae in 'scientific' knowledge in the domain of water. In certain cases, experts, sensing some confusion, offered additional interviews and elaborated on technical aspects, but persistence in the domain of the 'technical' aggravated the feelings of embarrassment and 'shame', at times so intense that the only way out was to make excuses and to express gratitude – 'thank you so much for your help, I will come back at a later stage.'

Gender also reduced opportunities to gain knowledge in other ways. The opportunity to visit farmers in isolated rural settings was forfeited on several occasions as white agriculturists treated the interview in a demeaning manner and flirtatious undertones by respondents were unwelcome. The 'site tour' offer, for instance, was turned down despite the temptation to gain experience and knowledge on the workings of canals, farm dams or trans-boundary rivers between neigbours where water was heavily contested. Punch (in Denzin & Lincoln 1998) draws on the work of Martin (1980) who as a woman in policing was unable to 'penetrate the world of policemen's locker

room' (1998, p. 165) and Hunt (1984) who 'because of features of her identity – white, female, educated outsider – found that there were impediments to developing rapport and trust with different categories within the police' (Punch 1998, p. 165). These observations, although in a different sector altogether, are relevant in the case of specialist research in the predominantly androcentric world of water resource management.

Interviews with public officials in local municipal offices were 'safer' and the terrain was more familiar. It is possible that the direction the project took, in engaging with the concerns of public administration and local government in more depth, was due to the ease of verbal protocol and ease of setting and surroundings with town engineers that allowed for uninterrupted data collection.[14] But it is likely too that the emphasis on local government, as the primary site of intervention and service delivery, places importance on the problems and challenges experienced by local government and highlights the problem of trust at this level.

The sampling rigours of quantitative data collection are inappropriate for qualitative data that demands other rigours, but, importantly, bias did occur and the following examples are pertinent: 1) data collected from key informants whose discourse matched more easily the researcher's discourse is superior to data collected from key informants whose dominant discourse is scientific and technical. This is evident from the field notes and the gaps that occur in the field transcripts, 2) the linear progression of time provided the opportunity to correct the skews both because of awareness of the 'unscientific' nature of certain inquiries but also because the dominant discourse became more familiar as more knowledge was acquired and the time lapse did not skew but rather reinforced emerging themes, 3) the filtering frame of reference of the researcher deciphered more easily certain recurring themes rather than others and resulted in easier indexing and more accurate memory recall, 4) the researcher's own bias, often implicit rather than explicit, produced hidden queues, and it is possible that they were less 'hidden' than intended, producing therefore counter-transference effects or reactivity (Maxwell 1998, p. 91) or what Krosnick (2000) names 'satisficing' (2000, p. 6) – providing pleasing rather than correct information, 5) the

[14] At least the interruptions were of quite a different nature, for instance phone calls, public officials knocking on the door as part of the everyday calls of duty in busy municipalities.

researcher's own interests skewed the data in the opposite way, resulting in the desire of key informants to counter balance what they perceived to be research bias, thus underreporting incidences of thick trust, or in-group/out-group dynamics. As the respondent corrected for perceived research bias, the desire to mitigate or even undermine the research premise, largely but not only projected,[15] underreported certain events and over-reported others.

Interaction between subject and object

Janet Holland and Caroline Ramazanoglu (in Seale 2004) characterise interviews as 'stylised social events' (2004, p. 184). Reflexivity is an important research attribute and refutes the idea that the researcher perceives the 'stylised social events' with neutrality or detachment (2004, p. 184). The research was affected by the researcher's own narrative that has influenced the research approach, the questions asked and the responses produced (Seale 2004, p. 184), and the research was hindered by a lack of shared assumptions in some cases and helped in others. The impact of the researcher's own journey played a significant role in the data collection process and influenced the way in which what Seale (2004) calls matching, did or did not, occur (2004, p. 185).

In general, personal research experiences[16] also affected the inquisitive inquiry into trust and progressively introduced confidence that shame was an important but neglected feature in social capital discourse. In the exacting words of Wolf (1996), 'one's position in the social hierarchy vis-a-vis other groups potentially "limits or broadens" one's understanding of other's (1996, p. 13).[17] Because of personal and working research experience, there was dissonance with the cognitive discourse of scientists and pragmatic engineers or public servants which appears as Schaap & van Twist (1999) define as incomprehensible or unintelligible (1999, p. 72) while the discourse of the marginalized and the previously excluded, or those who suffered the effects of a top down style of government, was more coherent.

[15] The publication of an article by the author 'Washing away the sins of the past' in the *International Journal of Public Administration* is a case in point.

[16] SALDRU 1990-2001 and 29 evaluations on behalf of Impumelelo Innovations Award Trust 2002-2004.

[17] Also note the reminder by Wolf that 'why assume that the perspectives of those on the margin are less distorted rather than simply different from those not on the margin' (1998, p. 13) for common and shared positions are not necessarily going to lead to common understandings (1998, p. 14).

Like a bridge over troubled water

The 'meaningful rendition of the whole human experience' (Hilliard in Sefa Dei, 1997, p. 210) promotes inclusivity and certainly, as Riggins (1997) warns, in the dominant discourse of science and technology, the repetitive nature of 'stereotypes' does not mean that they are the correct or the only depictions of reality (1997, p. 8). They are not 'the facts', as the dialogue on knowledge, agency and power in Chapter Five proclaims. Underpinning the discipline of academia and furthering the gains of excellence in the social sciences does not imply that the emotional or feeling context of the research project be denigrated in any way. Louise Vincent's (2004) article 'What's love got to do with it? The effect of affect in the academy' is an indictment of the way in which academic excellence assumes the exclusion and repression of emotion. Vincent argues that the binary between reason and emotion is questionable and notes Freire's (1972) distinction between 'true words' and inauthenticity (in Vincent 2004, p. 107). 'Inauthentic words are unable to transform reality for they lack connectedness to the world and to the lived experiences within which they are spoken' (*ibid.*). Academic critique is comfortably located in the theories of others and, although implicit, the passion for the topic lies all too often beneath the surface.

Importantly, the dominant view, according to Vincent (2004), is that 'strong emotions are quite out of place in academy, belonging as they do to the realm of the intensely private' (Vincent 2004, p. 113). Vincent goes on to argue that this view has become so dominant that it has managed to cast itself as common sense and that, she asserts, speaks loudly of the prevailing power relations (*ibid.*). Vivian Bickford-Smith (1999) and Ross (1999) consider the way in which the public and private are organised in their work on the theme of 'respectability', where some actions are considered values (virtues) while others are denigrated as they are not considered to be respectable.

Following on from this argument, trust itself, as a construct in development discourse, is far more acceptable than shame, but that does not mean that shame is less relevant as a determinant of social action. If the acquisition of knowledge is inhibited by shame-based feelings, rooted in a history of oppression or current experiences of poverty, whether these be water scarcity, scarcity of knowledge or scarcity of food, they are critical determinants of social action. The determinant defines and shapes in-group/out-group identities as acutely as does trust, more easily included in

development discourse. Puzzling distortions, so well described by Wicomb (1998), are less welcome in the ordered universe of 'science', and the emphasis on the software rather than hardware aspect of water (Turton 2002) continues to underplay the profound effects that deprivation of water has on people.

This study brings shame to the fore. This is demonstrated using the rigorous codes of academic excellence. It is argued that this construct is no less important than the construct of trust. Suspension of trust, or healthy manifestations of distrust, has been identified as the paradox of democracy (Warren 1999; Misztal 1996). If an individual experiences shame it can be perceived as a signal that all is not right. Feelings of shame might be introduced due to style of government, discordant relationships between state and citizen, abuse of knowledge, power or inhibition of agency. Critical inquiry into shame can therefore provide opportunities for understanding barriers to the deepening of democracy and conditions that are obstructing change.

Emotional versus cognitive as a bias for data gathering

The ease of verbal protocol of expert informants is, as the discussion above has indicated, both an advantage and a disadvantage. Ease of verbal protocol results in texts that produce a wealth of experience and expertise and the verbal protocol enables the respondent to proceed unchecked. The researcher is thus supposedly given an opportunity to fit together the pieces of the puzzle and to unravel the way in which reform is taking place in the water management area. The disadvantage of ease of verbal protocol, as has been suggested above, is that the researcher is engulfed into the dominant knowledge regime, and lacking the skills – or confidence – is unable to redirect the interview and wade out of the morass of information. Repeatedly in these instances the feeling is one of entrapment, and the response of the researcher is, under these conditions, invariably silence or, particularly in the initial phases of the project, withdrawal. In most cases frustration at not standing one's ground was acute and confidence in the knowledge regime of anthropology and social research temporarily shaken.

Furthermore, the research itself was affected by the distortions produced in the field and the inability of the researcher to decipher contradictory messages, signs and signals that were emerging during the investigation. However, the CMA process itself

is subject to distortions and ambivalences as it finds difficulty in realising new democratic values. A new script in the domain of water is struggling to find expression, and the research process is affected by these struggles.

The research experience accentuated strongly the divide between technical and social expertise. The social is uttered as a largely unintelligible discourse that falls between the cracks and is perceived by some technicians and public officials themselves as largely unhelpful in advancing the cause of CMA. The incongruence of the two regimes is stark, despite the emphasis by policy and politicians on *integrated* catchment management. The research inquisition has articulated, rather than solved, the vagaries of the transition from the old to the new, the technical and the social. The inquiry has unlocked gateways in the process of gaining new knowledge, and in so doing, latent shame-based components of the internal authority of the researcher that might have been manifest have been appeased. The result is the production of trust in the research process itself.

3. Structure of the thesis

Chapter One has dealt with the rationale and approach to the study

Chapter Two is tasked with the history of ideas of three concepts: trust (as a component of social capital), shame and participation and how the thematic constructs of trust and shame impacts on issues of inclusion and exclusion (participation). The chapter engages with several cross cutting themes and is densely located within theoretical notions of trust and shame although it introduces the case study, making way for the empirical data, in its discussion on the theme of participation in the latter part of the chapter. The idea in this chapter is to cover extensively a wide range of theorists in order to present the reader with a set of ideals. The theoretical discourse is arranged into three parts.

Part One on 'Trust' is divided into the following ten subsections:
1) Background to the ideas of social capital and how they matter to development discourse. 2) The distinctive properties of social capital are presented. The differences between the structural and attitudinal components are introduced. 3) Trust and

Modernity is the next subsection, and, as all social interactions are embedded, the usefulness of considering trust within modern, as opposed to 'traditional', country contexts is critically examined. 4) Transformation in the water sector requires a change from old systems to new systems and the reform or creation of water management institutions is of key interest. The idea of institutions as sites for the production of trust is considered, and 5) what the conditions are for the production of trust in institutional settings 6) The subsection on trust, inclusion and exclusion considers the meaning of democracy and how including people enhances the democratic project. 7) The problem of specificity versus universality follows on from this discussion. How to merge the specific with the universal and to build trust between strangers is largely dependant, the chapter argues, on the 8) style of government, and this subsection examines style of government within leitmotivs of trust, risk and power. 9) Subsection nine considers poverty and the linkages between poverty and scarcity of social capital, in particular trust. 10) This subsection is linked to the ideas of modernity, but here the purpose is to distinguish between good and bad social capital and the subsection is entitled 'Too much trust, too much of a good thing. The final two subsections lead into Part Two of the theoretical chapter which presents the analytic framework for Shame.

Part Two is on 'Shame' and is divided into eight subsections: 1) The first subsection offers a brief introduction to the theme of shame and then considers 2) shame in the extreme and presents exaggerated examples of shame in order to illustrate how it becomes a determinant of social action. 3) Subsection three follows on from the background discussion and further develops the ideas of shame. 4) The theme that was considered in Part One of this chapter is elaborated in the subsection entitled 'Shame and modernity'. 4) 'Shame and agency' develops the argument that shame inhibits agency, 5) and contrasts *gleichaltung* (wellbeing) with embarrassment, criticism and insult. 6) 'Shame, identity and exclusion' and 7) 'Shame, honour and knowledge' complete the theoretical ideas on shame. 8) A summative discussion is presented that closes the formal discussion on shame by isolating distinctive properties of shame that fit tightly with distinctive properties of trust and considers whether and in what ways shame could inhibit the production of trust.

Part Three of the theoretical chapter covers ideas on 'Participation' and begins with the 1) rationale for participation and 2) contextualizes participation within development discourse. 3) The problematic of trading outcomes with process is the next subject for debate, 4) but participation, like trust, is a vague term and the intended and unintended consequences of the vagueness are noted. 5) The final subsection of Part Three reflects on participation and different forms and meanings of participation. In so doing it makes explicit reference to the water sector and introduces the Breede River Basin Study in order to contextualise notions of participation and non-participation.

A brief conclusion to the theoretical chapter considers whether and in what ways these ideals might be useful in better understanding the transformation process.

The discussion in **Chapter Three** takes the reader through the: (1) background to water examining the background of water policy and current geographical and social landscapes that have been shaped by the historical legacy depicting how state practice around water in South Africa was organized in the past. The important theme of (2) water and poverty is developed. The chapter then reviews recent government Acts that are relevant to the delivery of water to consumers portraying the systems, and (3) legislative guidelines and policy documents with specific reference to the two key legislative frameworks, the (i) Water Services Act (no 108 of 1997) and the (ii) National Water Act (no 36 of 1998) with a discussion on the organisation of the water sector in South Africa and (iii) the National Water Resources Strategy. (4) This is followed by a subsection on policy aims and achievements. This part of the chapter is further divided into six subsections: (a) general, (b) knowledge regimes, (c) tariff and cost for water, (d) local government, (e) urban versus rural water supply and a brief paragraph on (f) water and trust. The chapter concludes with 5) summative remarks.

Chapter Four reviews the changing state responsibility for the delivery of water to consumers and the changing role of the state in integrated water resource management, in particular the devolution of responsibility to local government. The chapter examines how the changing role of the state affects the production of trust and it scrutinises the interaction of national government officials with local government

and other role players and how this interaction affects trust-building processes. Three themes have been identified and organise this discussion: 1) synergy between non-state and state actors,[18] 2) bureaucrats and change aversion and 3) style of government. These three themes are discussed within the following contexts: a) the establishment of a water user association, b) establishment of a local catchment management plan and c) implementation procedures at local government level. The chapter begins with a general discussion on the role of the state in producing trust using the themes as an organising tool. This general discussion is backed up by empirical evidence gathered within three selected contexts, 1) the Cogmanskloof Irrigation Board that is in the process of transforming into a water user association, 2) the Palmiet Catchment Management Plan, and 3) local government, where particular reference is made to the Greater Hermanus Water Conservation Programme. The chapter concludes with a general discussion section followed by summative remarks.

Chapter Four produces data that reflects on synergistic relationships between state and local actors and examines the way in which state and non-state actors engage in the reform process. It is within this context that Stompka's (1997) focus on the style of government is particularly useful. Inequality and differences between people can hinder the flow of information and can be disastrous for sustainable development and democracy (Ostrom 1996; Farrington 1999). Chapter Four explores how these theoretical notions are relevant to the inquiry.

Chapter Five continues to expand on the features that were covert in the trust discourse developed in Chapter Two and further develops the themes of democracy and participation that constituted the closing arguments of that chapter. Chapter Five furthers the debate on the themes of synergy between actors, style of government and bureaucrats' resistance to change and promotes these important topics by featuring in particular the following four facets: 1) participation, 2) knowledge, 3) power and 4) agency. The discussion makes explicit the interconnection between these four features and the constructs of trust and of shame. The empirical data proffers that participation, knowledge, power and agency are critical components of the attitudinal construct of social capital and trust – advancing too that shame belongs alongside

[18] With particular reference to 'intermediaries'.

trust – both being important determinants of social action. Knowledge is critical to participation and poor people, suggests Desai (1994), cannot negotiate participation and secure control of decision-making processes without it. 'Capable agency' (Krishna 2002, p. 165) is necessary, and according to this author has a multiplier effect on the production of social capital. Krishna (2002) suggests that people learn what works and what does not work.

The **Conclusion** to the study reconsiders the research approach and the way in which the themes were elaborated. The conclusion is tasked in particular with assessing to what extent the ideas match reality as perceived by the researcher. The chapter concludes in suggesting to the reader that the construct of trust is an important theoretical construct but that it is in the development of a more complex set of analytic tools to support the trust construct that it becomes most useful. The conclusion takes up the leitmotiv of shame and considers whether or not it would be a useful addition to the proposed trust toolkit. The chapter examines the tensions between the intended reforms and the realisation of these reforms in the Breede-Overberg WMA and the changing role of the State in implementing these reforms.

Chapter Two: trust, shame and social capital theoretical constructs

The critical inquiry that concerns this work deploys the constructs of trust and shame and locates these themes within a broader set of analytic tools: style of government, bureaucracies and change, synergy between state and non state actors and the recurring themes of knowledge, agency and power. This chapter is tasked with locating the two core constructs of trust and shame within a theoretical framework. It presents ideas that will be critically applied to the empirical cases and provides a starting-point for the inquiries into the systems, peoples and institutions in the water sector. The discussion makes explicit notions that are implicit or explicit in diverse theoretical studies on social capital and that are at the core of contemporary development discourse, participation, inclusion/exclusion, power, agency and knowledge. The chapter examines in which ways trust and shame are determinants of social action, in particular, it reflects on the way in which shame is an inhibitor of trust and investigates how shame might curtail the establishment of new solidarities between water users, impeding the development of reform in the water sector.

The chapter is presented in three parts, 1) trust, 2) shame and 3) participation. The chapter begins with a background to notions of social capital, locating the attitudinal or cognitive component of this construct within the social capital discourse. The discussion on trust is further divided into eight subsections: 1) notions of trust and modernity 2) institutions as sites for the production of trust 3) conditions for producing trust in institutional settings 4) trust, inclusion and exclusion 5) specificity versus universality 6) trust, risk and power: style of government 7) poverty as an impediment to trust and finally 8) too much trust, too much of a good thing? The second part of the chapter introduces the construct of Shame. This section is further divided into six subsections: 1) shame in the extreme 2) shame and modernity 3) Gleichaltung versus embarrassment, criticism and insult 4) shame, identity and exclusion 5) shame, honour and knowledge. The section on shame is completed with summative remarks on shame.

The theoretical constructs of trust and shame include features of participation and as participation in the reform process is or is not achieved, trust and/or shame are

affected. The final section of the chapter makes the linkage between trust/shame and participation explicit and introduces empirical evidence into the theoretical arguments. It is further divided into the following five subsections: 1) the rationale for participation 2) contextualises participation 3) people to pipelines 4) trading outcomes for process 5) intended and unintended consequences of vagueness and finally 6)) reflections on participation.

Background

The ideas behind social capital are not new (Rose 2000, p. 147) and have been part of philosophical inquiry as early as Parsons (1949), Durkheim (1897) and Marx, who, amongst others, reflect on social interaction. Norbert Elias's (1978), *The Civilizing Process* or reflections of philosophers such as Wittengenstein (1953), who examines language and meaning and its inevitable ground in social meanings, Habermas's (1986) *Communication and the Evolution of Society* or, in the second half of the nineteenth century, Durkheim (1897), grappling with the social construction of individualism and Hegel (1952), on disconnectedness and anomie. In the discipline of anthropology, ritual (Geertz 1973; Malinowski 1922; Turner 1974) reciprocity (Mauss 1950) and co-operation between neighbourhoods and communities have long been a central focus. Malinowski's Argonauts of the Western Pacific (1922), Geertz's (1973) descriptions of community ritual in Bali, Mead (1937) on social meanings, or Turner, (1974) on liminality, all contend with the positive and negative effects of social bonds and community life.

From the late 1960s, with the growing concern about civil wars, revolutions and the rise of authoritarian regimes (Clark 2003;[1] Freire 1972; O'Donnell 1994[2]), political notions of civil society – as the sphere where social movements become organized (Eade 1997, p. 5)[3] – were reinforced. Liberals called for greater political freedom, civil rights and the democratization of repressive regimes (Clark 2003, p.17). Links were made between economic growth and political freedom, for example by Ingelhart

[1] Clark's (2003) chapter *Concepts of Development* provides a useful overview of development trajectories.
[2] Democracy and horizontal accountability.
[3] Friedman (2002) is critical of the unquestioned admiration for civil society as an antidote to the discredited state. Many analysts of civil society have begun to call into question the durability of civic associations that played important roles in past democratic transitions, particularly in Latin America (Foley & Edwards 1996).

(1999), Fukuyama (1995), Ravaillon (2001), Hardin (1993), or Jones (2004) and this trend expanded in the 1980s to embrace a new conceptual framework for evaluating human wellbeing and development (Clark 2003, p. 19). Theorists like Amartya Sen (1999) moved away from a commodity and utility approach, arguing that human development is a process of enlarging people's choices (*ibid.*) and 'the very best theorists in mainstream economics worry about, and write about, social norms that determine and change preferences and behaviour' (Kanbur 2002, p. 478). Within the development context, as Seligman (1997) notes, the focus on civil society and citizenship is not on individual rights but is about shared solidarity, broadening the citizen's sense of self, conceived by Ellison (1997) as 'a position of defensive engagement of citizens' (1997, p.1).

Seligman (1997) argues that the construct of social capital has replaced the focus in the sixties and seventies on civil society and that it comes in the 'wake of a disillusionment with the term civil society' (1997, pp. 5-7). Like civil society it tends to be '*loose and imprecise*' (*ibid.*) and can mean different things to different people (Grootaert & van Bastelaer 2002, p. 52). It risks becoming, according to Portes (2000), 'synonymous with each and all things that are positive or desirable in social life' (2000, p. 535), and trying to be, according to Grootaert & van Bastelaer (2002), a catch-all concept but could end up catching nothing (2002, p. 5). It is, proposes Stiglitz (2000), a concept with a short and already confused history (2000, p. 59).

Social capital

Ostrom (2000) distinguishes four properties of social capital (2000, p. 173).

1. It does not wear out with use but rather with disuse
2. It is not easy to observe and measure
3. It is hard to construct through external interventions
4. National and regional governmental institutions strongly affect the level and type of social capital available to individuals to pursue long-term development efforts (Ostrom 2000, p. 173)

The study examines whether and in what ways social capital might be constructed through external interventions and the way in which national and regional

governmental institutions affect the production of trust. Chapter One examined the problematic of observing or measuring trust and constraints on research into intangible goods.

Social capital refers to various social factors that contribute to wellbeing, although these factors are often elusive. Knack & Keefer (1997), Rose (2000), Grootaert & van Bastelaer (2002) and Putnam & Pharr (2000) propose that in the face of a complex set of social interactions, social capital, including its social structures and underlying norms and values, increases the efficiency of collective action. But, as the dialogue in the chapters of this thesis suggest, social capital has both positive and negative attributes and can inhibit collective action and thus hinder the project of reform. Understanding these structures, norms and values and how they impact on democracy and on improved wellbeing is at the core of increased interest of a wide range of not only social scientists but also economists. [4]

Social capital has also been broadly defined by Grootaert & van Bastelaar (2002) as 'the institutions, relationships, attitudes and values that govern interactions among people and contribute to economic and social development' (2002, p. 2) or again by Putnam (1995) 'as features of social organisation such as networks, norms and social trust that facilitate coordination and co-operation for mutual benefit' (1995, p. 67), or as a 'stock of formal or informal social networks that individuals use to produce or allocate goods and services (Rose 2000, p.149).

The construct of social capital can be broadly divided into structural social capital that relates to the networks, associations, organizations and the rules that they follow, and cognitive or attitudinal (Grootaert & van Bastelaer 2002; Krishna 2002; Hooghe & Stolle 2003) social capital. Attitudinal social capital refers to norms, values and attitudes that affect people's lives and is, as Krishna (2002) notes, less tangible and unobservable as people carry it inside their heads – and more difficult to measure – as it refers to intangible notions such as shared values, reciprocity and trust (Dasgupta

[4] De Haan and Siermann (1996) present two conflicting hypotheses: '*some economists argue that freedom fosters economic performance and hence economic growth; others pose that high growth rates require economic controls and reduced freedom*'. See also Ravaillon (2001), who, referring to non-tangible assets, recognises that micro-empirical work on growth and distributional change is required to better grasp the role of these assets in economic growth.

2000; Grootaert & van Bastelaer 2002; Krishna 2002; Warren 1999). Mistztal (1996) considers trust, the attitudinal or cognitive component of social capital, as a highly problematic but recurrent feature of social relationships (1996, p.13), and the empirical data will examine whether in the reality trust is as problematic as Mistztal (1996) suggests.

The two components of social capital act together, for according to Krishna (2002) cognitive aspects predispose people to mutually beneficial collective action while structural elements facilitate such action (2002, p. 66). According to Grootaert & van Bastelaer (2002), Warren (2001) and Woolcock (1998) trust does not necessarily require embedded structural elements of social capital and similarly, according to these authors, the similarly structural elements of social capital are not necessarily conducive to the building of trust. The empirical evidence reflects on how networks and structural social capital affect the development of trust and, as both components are seemingly determinants of social action, they are considered for the purpose of this study to be critical analytic tools for the analysis of institutional transformation.

Woolcock (1998), in his 'brief intellectual history of social capital' (1998, p. 159), does not find it surprising that the actual words 'social capital' were first discussed within an economic framework by Alfred Marshall (1890) and John Hicks (1942) and were used to distinguish between temporary and permanent stocks of physical capital (Woolcock 1998, p. 159). However, according to the same source the significance of social capital was first identified by Jane Jacobs (1961) and Bourdieu (1977). Jane Jacobs (in Woolcock 1998) notes:

> Networks are a cities irreplaceable social capital. Whenever the capital is lost, from whatever cause, the income from it disappears, never to return until and unless new capital is slowly and chancily accumulated (1998, p. 192).

According to Woolcock (1998, p. 155) the construct was only fully developed by Coleman (1990), Putnam (1993) and Portes (1993). Today it has become accepted in mainstream development discourse, including economics, where the relationship between these intangible social assets and financial capital is acknowledged (Jones

2004;[5] Knack & Keefer 1997;[6] Ravaillon 2001;[7] Sen 1999[8]), although some theorists doubt that social capital has a positive effect on household income generation and poverty reduction (Mallucio *et al.* 2000).[9]

Theorists argue that as advanced technology, global connections and the demise of autocratic and top-heavy states took man into the realm of the individual, rather than the collective, social bonds were severed or threatened (Scheff 1990, p. 13), connections between people became more fluid and the denser networks of kin, friends or close neighbourhoods were replaced by new forms of social interaction (Seligman 1997; Mistzal 1996). The new forms of social interaction in the domain of water reflect puzzling convolutions that are not easy to decipher.

Section One: Trust

1.1 Trust and modernity

De Hart & Dekker (2003) and others (Giddens 1990; Offe 1999; Hardin 1999; Halvorsen 2001; Seligman 1997, 2001) locate notions of social capital within discourse on modernity and modernization, suggesting that the more well to do in 'modern societies' possess generalized trust, independent of locality, while others less well to do, don't. Fukuyama's (1995) core argument pivots on the notion that economically strong states (modern) have more social capital. These theorists argue that generalized trust in government, a product of a secure economic environment, manifests in social trust and social capital, which is an expression of modernity (Fukuyama 1995; Offe 1999; Seligman 1997, 2001). The arguments developed in Chapters Four and Five consider whether the notion of generalized trust is relevant in the WMA or whether there are merely pockets of trust within groups that signal

[5] Jones demonstrates that greater trust in wealthier members in new group situations might improve prospects of collective action (2004, p. 707).
[6] Knack & Keefer proposes that group memberships are not directly related to economic performance and are unrelated to trust (1997, p. 1284) but that trust and norms of civic cooperation are stronger in countries with formal institutions ... and are less polarised along lines of class or ethnicity (1977, p. 1252).
[7] Ravaillon (2001) notes that human and physical capital have been emphasised but that intangible assets and risk, exclusion and so forth have received less attention.
[8] Sen's (1999) emphasis on capabilities, autonomy and freedom gave new insights into the relevance of these 'assets' for development.
[9] Mallucio *et al.* (2000) note that bridging social capital would help mitigate for shocks to vulnerable households but that in KwaZulu-Natal, the site of their research, networks were narrow and households were unable to cope with shocks.

generalized low trust, both vertically and horizontally. Eisenstadt (1995) takes the position that people who do not belong to the 'narrow minimal scope of primordial units' (in Offe 1999, p. 55) need to construct trust amongst each other. This notion becomes an important one in the story of water that unfolds for it is difficult to unbundle the 'scope of primordial units' that Eisenstadt refers to, and it is likely that the reality on the ground might be far less tidy than is suggested.

The anthropologist Harriss (2003) agrees that current thinking on trust suggests a movement from pre-modern contexts where trust is 'supposed not to be a problem since action is quite predictable' (2003 p.758) but it often is less unproblematic than 'supposed.' The notion of networks and connectedness is at the centre of Granovetter's (1973, 1985) work. For him, actors 'do not behave or decide as atoms outside a social context' (1985, p. 487) and 'are instead embedded in concrete, ongoing systems of social relations' (*ibid.*). Granovetter's embeddedness is an emphasis on the concrete personal relations that are not only able to generate trust but also to discourage malfeasance (Granovetter 1985, p. 490), but which appear to be 'soft and comforting,' ignoring the 'harsh and oppressive' dimension of power that can be present (Harriss 2003, p.764).[10]

The boundaries between familiarity and trust – and modern and traditional – as well as the relationships between people are more blurred than would appear. Granovetter (1985) notes that in both modern and traditional contexts risk is the feature that distinguishes the modern from the old and that it is risk, therefore, that distinguishes trust from familiarity.[11] The feature of risk becomes important in the analysis of the empirical data, and is discussed under the subsection risk, power and style of government below.

A useful way of considering the differences between what Woolcock (1998) notes as enmeshed social relations of one type or another (1998, p. 162) is the distinction between network capital and social capital. People with network capital, for instance,

[10] Harriss (2003) quoting Sayer (2001). However, Harriss's research on business in Indian firms confirms Fukuyama's hypothesis that the businesses are run by family and kin or caste but, unlike Fukuyama, Harriss's emphasis is on the dimension of power.
[11] WH Auden is cited in Turner (1974) as referring to a passage from 'needless risk' to 'endless safety' (Auden cited in Turner 1974, p. 202).

remain dependent on locality and neighbourhood, in other words tied by blood and locality,[12] and are, as the anthropologists Geertz (1993) and Malinowski (1926) suggest, bound by pre-modern or traditional social bonds. Implicit in this argument is that modern autonomous people are able to form bonds with others that are not solely based on family ties or neighbourhood networks and that members of pre-modern or traditional societies are not. The core argument is important but the distinction between the modern and the traditional does not sit comfortably, and post-modernists (Lyotard 1979; Esteva & Prakesh 1998; Rosenau & Czempiel 1992; Rahnema 1997) contest the usefulness of the notion of modernity and argue that the premise on which these arguments is founded is questionable.[13] A similar concern has already been expressed, about assumptions made about western notions of knowledge and objective science and this concern will be further explored in Chapter Five.

1.2 Institutions as sites for the production of trust

Seligman (1997) identifies trust as threefold: trust in persons, trust in institutions and trust in abstract systems (1997, p.18).[14] Transformation and trust can be produced within organisations, there can be trust in the organisation itself and there can be trust in systems that have been established by government, all of which affects ordinary water consumers. The focus in analysis of trust and transformation in the water sector engages with these three levels of trust, although the intersection of trust between institutions, people and systems is not always clear.

A culture of trust or distrust is not produced by democratic institutions – although institutions are, as Ingelhart (1999) suggests, one of many factors that contribute to the emergence of trust or distrust. In the reform of the water management institutions, the way in which the management systems are developed is considered as a necessary, but not sufficient, ingredient for trust. North (1990) argues that the main function of

[12] See Victor Turner's discussion on *communitas* and *gemeinschaft* (1974, p. 202).

[13] The idea that there is a path whereby traditional people move through to modernity and acquire technology and goods that make them more 'modern' is contestable. It implies that traditional communities lack complexity and diversity and makes over-simplistic allusions to homogeneity. A similar argument is followed in Chapter Five's, section on knowledge that suggests too that dominant discourse defines the parameters of what is superior and desirable knowledge.

[14] The overwhelming vote in favour of the African National Congress in the elections of April 2004 is clear proof that trust in systems is high and that it overrides any distrust in people who administer them. The ANC is trusted, as a legitimate governing system, confirming what Warren (1999) has claimed, to understand the rules and policies, for there is legitimacy in the institutions even without knowledge of their content.

institutions is to reduce uncertainty by establishing a stable structure for human interaction (1990, p. 25), but institutions, particularly during periods of transition from an autocratic regime to a democratic one, struggle to achieve this. Powell & Dimaggio (1991) consider institutions to be 'rife with conflict, contradiction and ambiguity' (1991, p. 28) and, according to Offe (1999), they are incomplete and ambiguous places where patterns of precarious and potentially contested cooperation are debated (1999, pp. 66-67). 'Trust is important for the material practices and organizing principles that are established and for the symbolic constructions that are part of institutions' (*ibid.*).

The new management systems that are being built as water management moves away from being a centralized state function to becoming a function of institutions at the watershed level would be, because of the radical nature of the proposed changes, contested or precarious sites (Offe 1999). Yet the way in which the ideas match the actual is not always neat and the analysis developed, particularly in Chapter Four, considers a number of premises put forward by the theorists. Powell & Dimaggio's (1991) premise that institutions secure the privileges and interests of some rather than all groups is particularly relevant as empirical evidence suggests that some water users are favoured over and above others (1991, pp.10-11). [15] Institutions, committees and forums are expected to have both positive and negative effects on water users and on furthering the project of democracy in the water sector. They can, as Serageldin & Serageldin & Grootaert (2000) proposes, under favourable conditions help provide adequate, accurate information that allows people to make appropriate, efficient decisions (2000, p. 48) and, if there is credible commitment by governments to the principles of democracy, they are able, according to Levi (1996), to break the vicious cycles of discrimination (1996, p. 48), thus laying the basis for what Levi (1996) calls 'generalized trust' (1996, p. 50). Are conditions in the CMA process favourable and is there adequate, accurate information for water users to make appropriate and efficient decisions?

[15] Powell & dimaggio (1991) represent the 'new institutionalism' but are in accord with the theory of Selznick's (1949) 'old institutionalism' in that both accept the dynamic and contested terrain of institutions although Selznick, to mention just some of the many differences, is "straightforwardly political' and also 'embedded in local communities' (Dimaggio and Powell 1991, pp. 12-13) in his analysis. Selznick's work on integrated watershed management is relevant for discussions in this thesis and it is remarkable that the many insights that are noted by theorists in recent decades were already identified in the early half of the century by Selznick in his analysis of the Tennessee Valley Authority.

The chapters that unfold are tasked with examining how well the theoretical claims of authors match with the reality that emerges from field examples. The claim that Powell & Dimaggio (1991) and Agrawal & Gibson (1999) make, for instance, that change, power and efficiency are fundamental features of institutions and that, because they are sites of contradiction and ambiguity, relationships of power are unevenly distributed across them, will be examined. Agrawal & Gibson (1999) asserts that once they are in place institutions are 'independent of the forces that constituted them. Institutions can change because of constant challenges to their form by the actions of individuals whose behaviour they are supposed to influence' (1999, p. 637).

Agrawal & Gibson's (1999) assertion is explored more fully as it might be possible that unequalised power distribution in institutional settings restricts the opportunities to challenge the form of the institutions. The dialogue that is pursued in the study critically examines how and under what conditions constant challenges to the form of the new management systems are possible, if at all. Although institutions for water management have been put in place as drivers of change and transformation, not all institutional forms result in tangible gains for their members or lead to practical action or change. Stiglitz (2000) suggests that one of the reasons for the restraint in opportunities or tangible gains for all members is that at certain stages in the evolution of social institutions there might be an undersupply of social capital (2000 p. 60) when the resource is most needed. This is a critical concern to both DWAF and to researchers who are considering obstacles that are standing in the way of the development of the new management institutions. The empirical data gathered suggests that the concern of Stiglitz (2000) is highly relevant for there appears to be an imbalance of social capital and trust, with an oversupply in one domain and an undersupply in another – where it is most needed. The urgency for a supply of social capital is to equalize the balance of power and produce new networks and new institutional forms. The nature of trust is that it is constructed on shared norms and reciprocity but during periods of transformation patterns of cooperation are renegotiated (Ruiters 1996; Offe 1999), and until new patterns of cooperation are seen to work and trustworthiness across segments is felt, it is likely that there will be an undersupply of the lubricant that smoothes relationships and makes things work.

Levi's (1996) emphasis on the quality of the institutions is critical, for as the author contends, institutions can 'promote trust of those you know and distrust of those you do not, those not in the neighbourhood, outside the networks' (1996, p. 49). Offe (1999) notes that institutions can nurture trust between people who have never before had contact with one another and for whom there is no relevant communal allegiance (1999, p. 70), and they can provide social solidarity (Luhmann 1995). Ruiters (1996) notes that in communal allegiance: '...new networks of trust and partnerships between former enemies ...between civics and local authorities, between capital and labour ... form part of a pervasive official national building project' (1996, p.119).

One of the concerns that emerges in an analysis of the empirical data is that shared norms and reciprocity are locked into networks that have been shaped under the apartheid regime. The opportunity for institutions in post-apartheid South Africa to be production sites for new trust building is therefore limited.

It is in the institutional settings, stakeholder forums, committees, water users' associations and reference groups that, as Offe (1999) hopes, individuals and groups of people who were in different pockets of social capital are provided with opportunities to test the trustworthiness of others (1999, p. 55). According to Offe (1999), institutions, because they represent norms and values, could offer a 'deceptively simple and easy way out of the structural scarcity of trust in all its dimensions' (Offe 1999, p. 65). In the ideal, certainly Offe (1999) presents an attractive solution although one that is 'too good to be true' in particular under the present institutional settings where there is the level of uncertainty and profound change as a result of the transformation process in the water sector in South Africa. Offe (1997), expanding on his premise, proposes that people who are not connected to primordial units need to build trust (1997, p. 10) and that institutions are sites where this can take place.

The relationship between this set of values and the reality is a problematic one and calls for a complex set of variables with which to analyse in which ways institutions are able to develop shared norms and values and how the development of these would further the project of transformation in the water sector. To artificially construct a system where cooperative relations will develop is doomed to fail in its attempt to

produce trust because, as Luhmann (1995) contends, it must be given freely (1995, p. 128). But developing the climate in which trust is able to be brokered is important. In other words, the artificial construction of a system might be necessary, at least in the early stages of transformation, to ensure that the conditions for the development of trust are offered. The risk of constructing artificial institutional settings that undermine rather than produce trust is also high.

Offe (1997) sees institutional settings as mediators or generalisors of trust (1997, p. 18). Like Ostrom (1996) and Levi (1996), Offe (1997) places emphasis on institutional rules and proposes that if the institutional rules are adhered to, institutions have the ability to generate trust and to build bridges of trust between strangers (1999, p. 70). Offe (1997) warns that in cases where the institutions lack plausibility and are not seen to embody the accepted democratic norms and values, they would be unable to produce trust and the outcomes would be considered dubious (*ibid.*). Trust is built on confirmations and 'it reacts to critical information not because of the facts they report, but because they function as indicators of trustworthiness' (Luhmann 1995, p. 128). What types of critical information would facilitate the production of generalised trust and would serve as indicators of trustworthiness? And, on the other hand, what critical information is being generated if there is a manifestation of low trust amongst water users?

1.3 Conditions for producing trust in institutional settings

Sztompka (1997) goes more deeply into conditions that are necessary for the production of trust, and for Sztompka (1997) style of government is one of the important determinants of a culture of trust. Sztompka (1997) considers that a style that is nurturing and inclusive will foster a culture of trust. For Sztompka (1997) it is this feature of style of government that provides an answer to Offe's question: what does it take for an institution to build bridges and to nurture trust between strangers? The 'spirit' of the law is expected to be transmitted to members and if the style of government is aligned with a specific set of values, according to Sztompka (1997) it will generate trust.

Under these conditions, in other words where the style of government enables the building of trust between members, Levi (1996) considers that policy performance

can be a source of trust (1996, p. 50). Rueschemeyer *et al.* (1992), Ostrom (1996, 2000), Levi (1996), North (1990) and Tarrow (1993) proclaim the importance of the state in the project of democracy. The state has the ability to reduce what Schaap & van Twist (1999) call 'network closedness' (1999, p. 65) and can counterbalance what Levi (1996) calls 'narrow dependencies' (1996, p. 51) that are risky. Chapter Four is tasked with examining more closely the role of the state and whether the state is contributing to the production of trust or whether, in fact, it is responsible for the perpetuation of shame, a feature that is discussed in considerable depth in the second part of this theoretical chapter. It is possible that if low trust emerges between water users, this could be linked to an interventionist style of government and if, on the other hand, there is high trust emerging between water users and government, this might be the result of a nurturing style of government in the way that Sztompka (1997) has suggested.

North (1990) considers trust as an important factor in institutional settings as it smoothes relationships, gains time and minimizes necessities for contractors and excessive legality but the generalisation of trust can also be enhanced through institutions that generate practices of fairness and neutrality. Offe (1997) clarifies this by saying that equal political participation by the regime that strangers are jointly subject to must be seen as neutral and colour blind, without built-in preferences, biases and selectivity or restrictions of access (Offe 1997, p. 26). There are conditions that would not be considered 'fair' for instance: 1) top- down decision-making that bypasses local water users could be considered unfair because the needs of some are likely to be amplified disproportionately to the needs of others, while 2) deployment of a dominant frame of reference and knowledge regime to the exclusion of alternative knowledge regimes could be considered unfair and exclusionary because the needs of some water users could be considered less intelligible or comprehensible than the needs of others.

Theoretically, institutions have the potential to generate conditions for the experience of trustworthiness of strangers, and between strangers and they can promote a sense of self, or what Offe (1997) refers to as a property to be agency-shaping and agency-enabling (1997, p. 27). Are water management systems providing opportunities for debate, dissent and differences (Warren 1999) and political dialogue (Ellison 1997)?

Under what conditions would institutions have positive effects for democracy (Warren 1999) and could they embody the spirit of the law and succeed in furthering the objectives of integrated water resource management (IWRM)? The discussions that are pursued in the following chapters scrutinise the way in which theory matches reality and discern which theoretical constructs are most useful in understanding transformation in developing country contexts in general and in the water sector in particular. The discussion continues by unpacking the linkages between trust and democracy and examining how inclusion furthers the project of trust and how exclusion, on the contrary, might hinder its production.

1.4 Trust, inclusion and exclusion

Dryzek (1996) defines democratisation as the progressive inclusion of various groups and categories in political life (1996, p. 475), and it is accepted that sustainability of development is more likely to be achieved 'if the commitment and energies of all sectors of society can be harnessed' (Minogue 1998, p.16).[16] The National Water Act (no 36 of 1998) provides the necessary conditions for the democratisation of the water sector by including water users who were disenfranchised and excluded from decision-making processes in the past. But are these conditions sufficient to drive the deep changes that are required to move from old to new? Notions of agency are so intimately connected to features of power, knowledge and participation (Giddens 1990; Desai 1994; Offe 1997) that these features become essential ingredients and inform the analytic framework that is developed in the thesis and that is discussed below.

Desai (1994) elaborates on the right of people to participate in the planning, execution maintenance and control of projects and decisions that affect their own lives, a process, he suggests, that is increasingly accepted as a good government agenda (Desai 1994, pp. 217-218). Krishna (2002) also proposes a bottom-up dynamic of development to replace failed top-down efforts to deliver economic and social benefits (2002, p. 3).[17] For Desai (1994) good government is not enough because the

[16] Coetzee *et al.* remind us it is only one of the ingredients necessary to promote sustained development and 'it is not to suggest that participation equals sustained development' (2001, p. 469).

[17] The absence of women in the institutional settings in the water sector is notable and there is a consistent exclusion of women. Their work as caregivers is carried out in private (Ellison, p. 1997) and although they are now recognised as active citizens, their inclusion, by any standard, is not happening.

involvement of the disenfranchised in decision making is, he suggests, a complex process that requires 'new mechanisms and structures' that are pro-poor (1994, p. 218). Knowledge is critical to participation because poor people are unlikely to be able to secure control and participate in decisions that affect their own lives without it. (Desai 1994, p. 221). Krishna (2002) refers to this as 'capable agency' (2002, p. 165) which has a multiplier effect on social capital (2002, p. 168) as people learn what works and what does not and also because, as Ostrom (1996) states, they are better able to monitor the accountability of their own members (1996, p. 229).[18] The way that knowledge is both produced, used and understood has a political dimension (*ibid.*).

Creating artificial settings for inclusion is problematic. Selznick's (1949) discussion on cooptation mechanisms, distinguishing between formal and informal cooptation described as the 'process of absorbing new elements into leadership or policy-determining structures of an organisation as a means of averting any threats to its stability of existence (1949, p. 13), is relevant. For if there is to be cooptation, then suitable mechanisms are required to ensure that those brought into the structures are not excluded from the inside, a concern that is well expressed by Newman *et al.* (2004) and Williams (2004). Selznick (1949) acknowledges the fact that formal cooptation does not envision the transfer of actual power (1949, p. 14).

As the study is concerned about transformation in the water sector and the role of trust and shame in this process, the dimensions of participation, inclusion and knowledge are pivotal. We share Ellison's (1997) concern with social inclusion and citizenship and agree that in a climate where social actors are increasingly 'confronted with the erosion, or transformation, of established patterns of belonging, they...readjust existing notions of rights and membership to new conceptions of identity, solidarity and the institutional foci of redress' (1997, p. 711).

This confirms again the importance of the 'new mechanisms' and that a 'good' government is in itself not enough.

[18] Selznick (1949) describes the minimum essentials for this process, and of relevance to this discussion is the principle 'that there must be active participation by the people themselves in the programs of public enterprise' (1949, p. 28).

For the progressive transformation of water management systems it is critical that there be a process in which, as Ellison (1997) proclaims, 'differences and highly differentiated needs' (1997, p. 706) are acknowledged in their specificity. Ellison (1997) claims, however, that the particular can be as misleading as the universal. The universal claims in the CMA process are concerns and preoccupations with ideals of integrated water resource management, a big idea rather than a reality for many. Varughese & Ostrom's (2001) paper on heterogeneity recognises that everyone does not want the same thing and to be fair and impartial to the needs of all sectors of water user groups, the need for specificity – rather than universality – emerges as critical for the production of trust.

1.5 Specificity versus universality

Building trust between strangers and fostering an environment of belonging is an important function of democracy and it can come about, as Desai 1994, Eade 1997, Farrington 1999, Krishna 2002, Selener 1997 and Selznick 1949 hope, by drawing people into decision-making processes. These authors propose that by drawing people into decision-making processes local needs would be better represented – and that in so doing the intended overall long-term outcome of reducing, or eradicating, poverty and inequality would be redressed. In the context of the water sector, drawing people into decision-making processes is a means to ensure sustainability and to realize the goals of integrated water resource management. Agrawal & Gibson (1999) and Ostrom (1996) agree that communities[19] play a key role in bringing about decentralization, meaningful participation, cultural autonomy and conservation. The principle driver for integrated water resource management is the recognition that social formations closest to the resources are best placed to manage the resources in the long run (Agrawal & Gibson 1999, p. 634).

But drawing communities in to decision-making processes is not proposed as a replacement for state involvement. Synergistic relationships between the state and local actors are championed by Evans (1996), Foley & Edwards (1996), Ostrom

[19] Agrawal & Gibson note that most studies that refer to communities in the field of conservation refer to a 'bundle of concepts related to space, size, composition, interactions, interests and objectives' (1999, p. 633). Note also the debate about heterogeneity and homogeneity, Krishna (2002), examining community peace efforts and Varughese and Ostrom (2001) who scrutinise the diversity of groups in managing common resources.

(1996), Levi (1996) and Tarrow (1993) as the answer. Ostrom and others (Evans 1996; Foley & Edwards 1996; Levi 1996; Tarrow 1993) examine ways in which government agents strongly affect the level and type of social capital that is available to sustainable development efforts (Ostrom 2000, p. 173), and the point that these theorists stress is the synergistic relationships between state and local actors. Synergy between state and non-state actors requires a two-way engagement, one which is participation from the bottom up and the other which is engagement from the top down. The achievement of this engagement would be its ability to attend to the specific goals of local water users while furthering the universal goal of IWRM. Sztompka's (1997) focus, on the style of government as a key determinant for trust building, is a preoccupation with intervention from the top-down,[20] while for Rose (1994) trust is built from the bottom up. But both these interventions, whether they be top-down or bottom-up, require a flow of knowledge between the various parties in order to equalise the basis of power and control (Selener 1997). Ismail Serageldin & Grootaert (2000), whose expertise in development is located firmly within international agricultural research and global development discourse,[21] goes as far as to use information as a measure for the level of equity that exists (Serageldin & Grootaert 2000, p. 49). Scheff (1990) approaches the problem of knowledge and power as a sociologist with a concern for emotion and the way in which emotion guides and informs social interaction. For this author, unequal access to knowledge is the source of in-group and out-group dynamics and the reason is that 'in modern societies, experts usually see laypersons in their own society, that is non-experts, as an out group whose common sense is tantamount to ignorance' (1990, p. 142).[22] The point that is being driven in these theoretical discussions is that inequality and differences between people can hinder the flow of information and they can be disastrous not only for sustainable development (Ostrom 1996; Farrington 1999) but for the overall democratic project (Przewoski et al 1996).

[20] Sztompka (1997) differentiates between interventionist and nurturing styles of government. Nonetheless his focus is on style of government rather than community and as such it is from the outside in, or top-down.

[21] Serageldin is vice-president for special programs at the World Bank and chairman of the Consultative Group on International Agricultural Research and the World Commission on Water.

[22] 'What Thomas Scheff seeks to develop is essentially a quite novel account of the nature of social life,' Giddens in *Forward* to Scheff's (1990) *Microsociology.* Also see Miller (1993) and Ostrom (1996).

1.6 Trust, risk and power: style of government

For Seligman (1997) and others (Warren 1999; Levi 1996; Luhmann 1979; Offe 1999) risk-taking is central to the building of trust, where if something goes wrong some 'undesirable event' caused by the trusted can result (Offe 1999, p. 47). If there is certainty of an outcome then there is no need to trust. Hardin (1993) disagrees that trust is something one risks or makes a rational choice about (Hardin 1999, p. 25) and he develops an argument for 'encapsulated interest for both the trustor and the trustee' (Hardin 1999, p. 26) where the focus is on trustworthiness rather than trust. Granovetter (1985) is also reluctant to adopt the 'rational actor' approach, but unlike Hardin he accepts that it is a 'good working hypothesis that should not be easily abandoned' (1985, p. 506) and opts for a 'selective rationality' (1985, p. 505).

But for Luhmann (1979) and Offe (1999) taking a risk is a rational choice that an individual makes. Trust is essentially risky and anyone who gives his trust supposedly, according to Luhmann (1979), 'considerably widens his potential for action' (1995, p. 128). Offe (1997) expands on the eventuality of an 'undesirable event' because 'my present action is premised upon the expectation of a future favourable response ...and in the absence of which I suffer a loss or damage' (Offe 1997, p. 14).

The relationship between trust and risk is particularly relevant in the context of water management which is overridden by complex technological discourse – where the outcomes for the layperson are not always evident – and which is also, currently, dominated by uncertainty and changes. When people are unwilling to take a risk, it is unlikely that new social capital will be produced because closedness or social fixation (Schaap & van Twist 1999) intrudes in the way in which people connect. Network closedness blocks innovation (Levi 1996) and impacts on the way in which social capital is built. But the attraction of network closedness, according to Molenaers (2003, p.122), is that it creates trustworthiness of the social structure, allowing the shared obligations and expectations that form part of that network to proliferate. Open networks, on the other hand, lack enforcement mechanisms (*ibid.*). Resistance to open up is also resistance to 'lose' the trustworthiness that has been consolidated between network members (Molenaers 2003). For Molenaers (2003), in order to maintain the

networks symmetry is fundamental between the different actors – for 'if one or both parties would start to nibble on the obligations inherent in the relations, both trust and reciprocity might in the end cripple' (Molenaers 2003, p.123). There are direct consequences of not living up to expectations.

Patterson's (1999) research on trust showed that 'anxiety and insecurity are clearly the most powerful forces driving distrust (Patterson 1999, p. 190). Thus, unsurprisingly, within the current climate of transformation and deep changes in the water sector, trust levels are not high. Patterson (1999) and Luhmann (1979) approach risk and uncertainty from different angles and both cases are true. Risk and uncertainty inhibit the formation of trust but risk and uncertainty are also drivers of it. In stable democracies, for instance in Scandinavia, everyone trusts everyone else (Ingelhart 1999; Stolle 2003), but there is an argument also that everyone can afford to trust everyone else because they are 'adequately secured against losses' (Luhmann 1995, p. 128). In high-trust societies, such as these, generalised trust has been established over time and through periods of interactions between individuals. Trust in government, in these instances, is also high as state capacity is able to make provision for and determine the quality and inclusiveness of service delivery and fairness (Stolle 2003, p. 34). The extent to which state capacity is fully utilised to further inclusiveness and fairness is questionable in the case of the Breede-Overberg WMA.

Change is risky and public servants are adverse to risk-taking (Andrews & Shah 2001). But change in style of government is particularly important in the South African context where the old regime was characterised by an authoritative and deliberately exclusive government and where distrust remains imprinted in the memory of the majority of South Africans (Ruiters 1996; Marais 2001). The regime was dominated by a style of government that was oppressive and restrictive, discouraging spontaneous group activity and trust (Stolle 2003, p. 31). Despite the regime changes and the democratisation of the country, many government officials maintain the same style – centralised top-down decision-making – that permeated the former regime, with the consequence that the deep change that has been expected and prescribed is not taking place. Unsurprisingly, therefore, reform in the water sector is slow and, according to Stolle (2003), mistrust slows down the process of reform (*ibid.*). The fairness of public servants and their impartiality is critical for the building

of a culture of trust (Rothstein & Stolle 2003, p. 192). The questions are under what conditions will these rules and resource divisions that were part of the old bureaucratic system change (Klijn 1999, p.33) and under what conditions will new social capital be created (Krishna 2002)? Kickert & Koppenjan (1999) suggest that know-how is a key 'tactical and strategic' aspect and that bureaucrats need to know about the actors involved and their idiosyncrasies (1999, p. 58). The know-how is part of the knowledge transfers that are required in both domain, a discussion pursued in depth in Chapter Five.

1.7 Poverty as an impediment to trust

The World Values Survey data demonstrates 'unequivocally' that people of rich countries show higher levels of interpersonal trust than those in poorer countries (Ingelhart 1999, p. 89). One proposed reason, as suggested above, is that the rich – and secure, knowledgeable and powerful – can afford to trust and have alternative resources – power, money and information (Offe 1999, p. 53). The argument goes then, that the rich are able to use their power, money and information if something goes wrong with the trust agreement. There is also disposable time, not only income, and more well-to-do people have the leisure time to join clubs, churches and associations. In the process, individuals get to know each other.

Barberton (1998) and Ribot & Peluso (2001) are clear about the correlation between scarcity of resources and tangible goods. In the water sector, the correlation between water deprivation and deprivation in intangible social assets and goods is evident. In other words, those most in need of trust can least afford the transaction costs of engaging in trust-based relationships (Offe 1999; Barbeton 1998). However, as the empirical data unfolds, it considers too the possibility that the well-to-do also have much more to lose as water reforms are undertaken. Analysis of the empirical evidence explores the reality that the costs of non-participation are higher and that it is in the interests of those who are better endowed with water, to activate their social capital if they wish to retain their endowments.

Another cause for paucity in investment in collective action in the water sector could be that the wealth of social capital of the poor has been dissipated as the previously 'poor' become key agents of change within the state.

One of the most persuasive arguments put forward by analysts of social capital is that thriving economic productivity is characterised by modern industrial relations where strangers cooperate with one another and form networks based on a culture of interpersonal trust (Putnam 1993; Fukuyama 1995; Knack & Keefer 1997) but they do not only cooperate for economic gains but also for sociability, approval, status and power (Granovetter 1985, p. 506). 'Enforceable trust' is, according to Portes (2000, p. 539), generated and sustained by the networks, for instance in the case where unregulated market transactions take place as community members imbue an entrepreneur among them with status and power in recognition of his/her income-generating activities (*ibid.*). Studies on respectability (Bickford-Smith 1999; Ross 1999) by historians examine conforming and sociability in terms of the need to be accepted in a system informed by Victorian values or virtues – what they refer to as 'respectability.' The silence of some water users who do not have the know-how, is understandable within this context where not knowing means losing respectability of the values or virtues that predominate in the domain of water. The values and virtues are also drivers of enforceable trust, as it is the right thing for beneficiaries to reciprocate and to honour payments (Portes 2000) and also it is the right thing for beneficiaries to conform to social values and to maintain respectability (Bickford-Smith 1999; Ross 1999).

Undoubtedly, from preliminary evidence so far in this study, and from the theoretical assumptions reflected above, there is a link between tangible and intangible assets. Granovetter (1985) does not refute the fact that intangible assets (social) have tangible (economic) gains, but he too argues that business relations are mixed up with social ones (Granovetter 1985, p. 495) and that there are networks of personal relations at all levels where transactions take place (Granovetter 1985, p. 496), or what Jones (2004) sees as webs of interpersonal relationship that consider individual behaviour but within a social context (2004, p. 700). As embeddedness is an important aspect of sociability, and linked closely to intangible gains such as belonging, status or honour, loss of intangible assets can be a devastating consequence of mobility. The movement from a known place also means the movement from social relationships and family with the incumbent erosion of norms of reciprocity and sharing that follows resettlement (McMichael & Manderson 2004, p. 91). Expressions of lost social ideals

and relations were frequently the framework within which women placed their experiences of loneliness, sadness and depression (*ibid.*). Scheff (1990) refers to severed social bonds, the most extreme cases of which were slaves who were 'wrenched not only from their families but also from their cultures' (Scheff 1990, p. 13). These concerns are pertinent for the reform in the water sector takes place within an uncertain social environment where political activists who were leaders of civil society are now in government and ordinary water users find themselves betwixt and between. This is true for white agriculturists and it is true for school teachers and community leaders who remain disempowered today and are unable to assist their local residents in improving sanitation or water.

Whether or not impulses to respectability, as featured in the theories of Ross (1999) or Bickford-Smith (1999), are helpful in understanding behaviour of water users is a task that forms part of the analysis. How does failure to trust affect opportunities in the water sector? Are the costs of failed opportunities to gain access to scarce resources an incentive for taking risks and engaging in trust-based relationships? Does failure produce what Kramer (2001) calls uneasy trust or feelings of shame that make it difficult for the development of conditions of high trust between water users? Is the fear of losing respectability, for others, a motivator to participate in the decision-making process?

Serageldin & Grootaert's (2000, p. 41) interest in social capital is more tightly intertwined with their research in the sector of natural resource development, and these authors consider ways in which social capital may or may not contribute to sustainable development. Serageldin & Grootaert (2000) reflect on the ways in which closed networks, or what Schaap & van Twist (1999) call 'network fixation,' might undermine cooperation in this sphere. The task of the study is to examine whether and in what ways network closedness might be unproductive for watershed development and obstruct the progressive advancement of new water management systems. Woolcock's (1998) discussion on the costs of embeddeness exposes the problematic nature of closed or what he calls 'embedded' social relations and he notes, as did Desai (1994), that the transition from these forms of social relations requires new institutional forms and requires the development of a new set of tools, on how to participate and how to construct new institutional systems (Woolcock 1998, p. 163).

Another differentiation that is worth considering is Granovetter's (1973) argument, developed in his earlier and complex article the 'Strength of Weak Ties,' that assumes weak ties to be more likely to link members of different small groups than strong ones, which tend to be concentrated within particular groups (Granovetter 1973, p.1376). In other words, he believes that dense networks are not as useful as having more 'local bridges' (*ibid.*). The way in which theorists approach the topic of social capital emphasises that it is a complex area and that there are different types of belonging. Warren (1999) and Grootaert & van Bastelaer's (2002) view is that belonging alone does not have a positive effect on democracy but that it is the scope and nature of the affiliations that matter.[23]

1.8 Too much trust, too much of a good thing

Conflating trust and familiarity can have consequences for the coherence of the analytic framework. The theoretical assumptions are that too much trust produces network closedness and that this, some theorists suggest, is negative social capital, the exclusion of some and inclusion of others (Woolcock 1998; Portes 1998; Portes & Landolt 2000; Granovetter 1982; Molenaers 2003; Ruiters 1996; Mishler 1997). It is not always clear when theorists discuss dense networks whether they refer to what Eisenstadt (in Offe 1999) calls 'primordial units' (1999, p 55) or a social context that is one of modernity. Notwithstanding the noted concern for lack of tightness in the social capital discourse that does raise concerns about its coherence, undoubtedly high degrees of discrimination close alternative avenues for economic gains and social honour (Woolcock 1998, p. 165). The following chapter expands on the relationship between water and poverty and traces linkages between water poverty and the effects of scarcity of this resource on feelings of exclusion, lack of respectability or lack of status. Poor people lack the opportunities to be actively involved in decision-making that could improve the quality of their everyday living. Farmer (1999) examines HIV/AIDS and stigma- related behaviour in Haiti and in his empirical setting,

[23] See also *The typography of voice* (Goldin 2004) for an analysis of belonging and the relationship between organisational adherence, identity, voice and economic gain.

personal agency and freedom and broader social and economic restraints are interlocked (1999, p. 84).[24]

The key features of the discussion on trust are that participation, inclusion/exclusion, knowledge and power are important features of social capital and that more or less of these features is a determinant of how and in what ways trust is produced and maintained. Chapter One argued the inclusion of shame in social capital discourse, and ways in which shame might determine social action are examined in the course of the empirical analysis. The theoretical discussion on shame that follows develops an argument for why it should be considered as a cognitive or attitudinal component in the construct of social capital. The theoretical discussion suggests that shame both inhibits – and therefore perpetuates – network closedness and that network closedness, exclusion and non-participation produce and perpetuate shame. If the water management systems are not producing high trust, could one of the reasons be that there is some degree of shame amongst certain segments of water users?

Section Two: Shame

Literature on shame,[25] not as prolific as the literature on trust, dates mainly prior to the nineties. The links between the trust issues which have taken such high profile in the '90's have not been made explicit, but readings on shame (Heller 1996; Lynd 1958; Nussbaum 2001; Peristiany 1974; Scheff 1990; Taylor 1985; Tisseron 1992; Seligman 2000) confirm that like trust, shame plays a key role in determining the engagement of individuals within the social context and shaping social interaction. Lynd (1958) suggests that the experience of shame seriously jeopardises or destroys trust (1958, p. 43) and that in shame there is a questioning of trust (1958, p. 207).

[24] Farmer (1999) makes the point quite clear in his book *Infections and Inequalities* that economic inequality favours epidemics and that these are closely linked to homelessness, racism and so forth. He makes the historical links too between political violence and long-sustained structural violence with increased rates of certain stigma-related diseases, for instance tuberculosis (1999: 259). Vulnerability to waterborne disease that is the result of poor access to adequate clean drinking water is not different. This is highly relevant to the discussion on shame that follows.

[25] Shame is used as a generic for a whole family of emotions including embarrassment and humiliation (Scheff 1990, p.74). Feeling words, like 'insecure, awkward and uncomfortable, can also describe shame (1990, p. 16).

> Shattering of trust in the dependability of one's immediate world means loss of trust in other persons, who are the transmitters and interpreters of that world... We have turned for response in what we thought was a relation of mutuality and have found our expectation misinterpreted or distorted. (1958, p. 47)

As the discussion below unfolds, it becomes clear, that shame themes, as explored by social science theorists, belong to 'social capital' discourse, and it is a highly relevant cognitive or attitudinal construct. In the same way that trust has been widely accepted as a core element of social capital (Krishna 2002; Putnam 1993; Putnam 1995; Grootaert & van Bastelaer 2002; Offe 1999; Seligman 2000; Sztompka 1997; Woolcock 1998) so too shame has its place in contemporary social capital discourse.

The concerns that are part of development discourse are also relevant to shame in particular: segmentation (Ruiters 1998), autonomy and embeddedness (Granovetter 1973; Woolcock 1998) and participation, power, knowledge, good government, democracy and citizenship (Blomkvist 1995; Desai 1994; Ellison 1997; Ostrom 1996; Rose 2000), risk (Offe 1997; Luhmann 1979; Levi 1996; Giddens 1990), Seligman's (2000) notions of self and modernity and Kramer's (2001) concerns with identity and trust in institutional settings or Ross (1999) and Bickford-Smith's (1999) discourse on respectability. The theoretical analysis that follows makes the links between trust, networks and shame apparent and leaves the space for the reader to determine whether or not a valid case has been made for the inclusion of shame alongside trust discourse.

2.1 Shame[26] in the extreme

In the early years of this century, Durkheim (1906 in Scheff 1990, p. 72) noted that 'social influence constituted an independent system in its own right' which is different from the political, psychological or economic systems (*ibid.*).[27] His hypothesis was

[26] The divide between shame and stigma is sometimes unclear. Contemporary work on HIV/AIDS for instance (Farmer 1999), Levine and Ross (2002) describe stigma and AIDS where infected persons feel that it is their fault and they have brought something on themselves. For the purpose of this thesis, stigma is different to shame in that there is an outward sign, a blight or disease, such as leprosy or AIDS. The borderline between stigma and shame is often fluid though, for instance, prisoners on Robben Island felt that they were being stigmatised and also felt shame (Naidoo 2000). Nussbaum's (2001) paper 'Upheavals of thought, the intelligence of emotions' was, in its draft form, entitled Inscribing the face, shame, stigma and punishment.

[27] Durkheim's social solidarity was determined by divisions of labour rather than by likemindedness (in Scheff 1990, p.22).

formulated after his examination of human behaviour where he noticed the importance of emotions for social solidarity (Durkheim in Scheff 1990, p.11) and recognised the relationship between shame and conformity. Durkheim (1906 in Scheff 1990) analysed the occurrence of suicide and reached the conclusion that in societies where individualistic tendencies were suppressed there were less suicides. In Catholic countries there were lower suicide rates than in Protestant countries where there is less conformity and less outer deference (Scheff 1990, p.72).

These concepts are familiar to urban historians who consider respectability and the gains that are achieved when individuals conform to socially acceptable virtues (Ross 1999; Bickford-Smith 1999), avoid being ostracised and fit in to the values and norms that surround them. Scheff (1990) criticises Durkheim's theory, that insists on social influence – and organic solidarity – as an independent system in its own right (Scheff 1990, pp. 72-74) as well as his methodology. In his critique, Scheff (1990) deploys a more intensive empirical research method to argue that the constraining factor for social interaction is *not* at a cognitive level and is not exterior, but rather that the compelling drive to conform to society is an emotional response (*ibid.*). For, he argues, social experience, particularly when there is conflict, is constrained by emotions (*ibid.*). The two determinants of social action that are selected as key analytic constructs, trust and shame, are considered in this research as both cognitive – they are determined by external factors – but also emotional – determined by internal factors. What compels the individual to conform is not the perception of recognition of beliefs (cognitive process) and external sanctions and constraints, for we conform even when we do not wish to do so, but rather the emotional self or more precisely the internal constraining mechanisms, a deference-emotion system (Scheff 1990, p.71). It is the internal, almost invisible, emotional system that compels us to conform with external sanctions as the price of non-conforming is high (*ibid.*). It is significant, according to Scheff (1990), that formal sanctions, rewards and punishments are infrequent while the deference-emotion system functions virtually continuously (1990, p. 75).

Shame is a painful emotion and, according to the theologian Phillips (1986), anything is better than the pain of experiencing shame. People exit (Leilde & Bekker 2003), are silent (Tisseron 1992) or withdraw completely (Scheff 1990) in order to avoid feeling

shame. Phillips (1986) interprets the biblical story of Ruth in terms of shame and deception where the biblical figure of Boaz, faced with a situation of shame, reverses it and ends up being 'honoured by all' (1986, p.10). But the pressure to conform obliges Boaz to deceive his closest relative in order to save face. Phillips's (1986) point is that the fear and Boaz's refusal to be shamed puts the citizen of Israel in a situation where there is no alternative at all but to deceive in order to retrieve honour.

The anthropological interest in shame has been in the main with its function as an instrument of social control (Epstein 1983, pp. 27-28) where the redressive aspect with its public expression of disapproval maintains the social order. But it is possible, and the observations put forward in Chapter Four and Five suggest that might be the case, that authorities use shame as a sanction for social control and that knowing that water users seek respectability and want to conform and feel that they fit in, they are less likely to challenge the dominant regime in the domain of water management and interfere with the way in which change does or does not take place.

2.2 Shame within an analytic framework

Although, as Scheff (1990) suggests, shame is an emotional and not a cognitive construct, he makes explicit the linkages between emotion and motivation to act, for, like trust, there is a relationship between shame, agency and power. Like trust, it has everything to do with inclusion, knowledge, acceptance and equality which are positive effects of democratisation. Like trust, it is usually invisible, 'hidden from view' and difficult to study (Scheff 1990, p. 84).

Nussbaum (2001) points out that shame is an inherited condition of our birth.[28] Social conditions that reinforce our inadequacy, incompetence or isolation will bring to the fore this inherited shame, and can paralyse and obstruct action or engagement:

> 'Aristophanes portrays shame as a painful emotion grounded in the recognition of our own non-omnipotence… a kind of primitive shame at the very fact of being human and incomplete underlies the more specific types of shame that we later feel about handicaps and inadequacies'(Nussbaum 2001a, p. 7).

[28] Nussbaum's psychoanalytic understanding of shame as a result of an infant's striving for perfection – and omnipotence – and that the experience of shame at one's lack of omnipotence gives way gradually in favour of trust (2001, p. 196).

Although, Durkheim argues that 'social influence constituted an independent system in its own right' (Durkheim in Scheff 1990, p. 72) and that conformity has some positive effects, the suppression of individualism does not have a positive effect on democracy. The positive effects of democracy are being able to dissent, argue, disagree and debate, enhance human freedom and encourage interpersonal trust. Risk-taking and shame do not sit comfortably alongside one another for someone who feels shame will be unwilling to debate, argue or act as a free agent.

Scheff (1990) makes the important observation that these intact social bonds are the result of a positive relation of self and he links the intact social bond, or feeling good about oneself, with the emotion of pride (Scheff 1990, p. 82). For him, social bonds assume not only a cognitive but an emotional connectedness between people. For Scheff (1990), the antithesis of an intact social bond is a threatened one, and the personal emotion connected with this threatened state is shame (Scheff 1990, p. 95). Shame is according to Scheff the reverse of pride. Lynd (1958) sees the juxtaposition of pride and shame as 'fruitless and misleading' and juxtaposes shame with honour,[29] deploying the Greek word, '*philotimo*' which is honour, the inviolability of freedom in oneself through selective identifications with aspects of one's own wider culture' (Lynd 1958, p. 252). Pride, according to her, corresponds with '*hubris*' or arrogance. This resonates with Vivian Bickford-Smith (1999) and Ross (1999) on respectability where adopting Victorian virtues and values cloaked feelings of poverty or racial segregation.

Knowledge about the actors involved (Kickert & Koppenjan 1999, p. 58), a nurturing style of government (Sztompka 1997), and recognition of local knowledge regimes (Farrington 1999; Ostrom 1996; Levi 1996; Miller 1993) are some ways that individuals can feel less inadequate, incompetent and isolated, reducing inherited shame or marginalised. According to Scheff (1990), the experience of shame varies in intensity but it always results in an inability to engage – manifesting either as silence,

[29] The work of Peristiany examines Mediterranean values of honour and shame, where dishonour and shame are clearly the opposite of honour. If shame is a lack of self-esteem, honour has many meanings but is connected with the Latin 'respect, esteem, prestige'. Like shame, the individual sees himself through the eyes of the other (1966, p. 211).

exit or even, in extreme cases, where the pain of shame is so intense, as suicide (Epstein 1984; Scheff 1990).

2.3 Shame and modernity

Heller, in her book entitled *The Power of Shame* (Heller 1985), offers a general theory of shame. Heller goes back to the work of Freud on guilt and emphasises that guilt and shame have different routes as guilt is the consciousness of a debt that has to be repaid (Heller 1985, p. 2) and the less it can or will be repaid, 'the more tormenting the guilt feeling comes' (*ibid.*). A cautionary note on modernity has been given above, but it is pertinent to note that guilt is perceived by Williams (1993) as a symptom of modern consciousness. Williams (1993) considered the Greek culture to be governed by notions that are nearer to shame than to guilt with the implications of freedom and autonomy that are associated with guilt and not with shame.

In the case of shame, the authority is also referred to as the communal referent (Seligman 2000, p. 38) or by Bickford-Smith (1999) or Ross (1999) as adhering to Elizabethan virtues and values. Seligman (2000) considers shame as an internal occurrence but what is critical to this understanding is that the members of the community who are experiencing the shame need to agree that certain actions and modes of behaviour would be '*shameful*'. In other words, it is the acceptance of the external authority that gives rise to shame. For Heller (1985), the laws, rules and regulations with which a system organises itself and legitimises its actions (external authority) need to be reconciled with the internal authority. The internal has a voice and is somebody rather than nobody (Williams 1993, p. 84). When the two authorities are in harmony with one another then an individual has a sense of self and is able to experience feelings of power and autonomy. When the tension between the two is so great that the two authorities cannot be reconciled the individual enters into a state of negation of self and meaningful constructs with the outside world are then extremely difficult (Heller 1985). The shame response is a primary regulator of behaviour (Heller 1985, p. 7). 'Being different remains shameful given that success as the measure of everything is imposed on individuals as the external authority' (Heller 1985, p. 19). As the study argues that the dominant organisational culture in the domain of water is 'scientific' and 'technical' it is unsurprising, that presenting facts

in a different way results in feelings of not fitting in and not matching the external authority.

Seligman's (2000) approach is slightly different as he argues that the idea of self as one constituted only by an external authority – what he calls obligations and allegiances, – is not in accord with modern liberalism (Seligman 2000, p. 40). Modern liberalism, according to Seligman (2000), argues for a participatory engagement which is dialogical in nature and which is in contrast to the Durkheimian notion of individual, voluntary compliance to moral dictates (Seligman, 2000, p. 40). The core of Seligman's argument is that the modern self has full agency and is able to participate. As a result exchange – either symbolic or material – is possible and part of the symbolic exchange is the 'trust' produced as a credit (Seligman 2000, p. 44). Clearly, for Seligman, this exchange is based on what he refers to as a rational actor model of self (Seligman 2000, p. 80). According to Seligman shame 'admits not recompense or restitution' (Seligman 2000, p. 81)

> With shame, there is an inevitable derogation in one's status as a person; with guilt one's status is intact but ones' relationship to others is affected. The shameful is not worthy of association; the guilty is still worthy, but a price must be paid (Morris, G quoted in Seligman 2000, p. 80)

The only way that shame can be expedited is to reconstitute one's self and not a relationship, for it is 'shame that we feel when we violate our own constituted sense of self' (Seligman 2000, p. 81). Shame never fails to remind us how 'mediated our autonomy really is' and 'we see in its manifestation the 'eyes of the other' as an authority external to self (Seligman, 2000, p. 82). Like Scheff (1990), Seligman (2000) acknowledges the extreme effects of shame are overwhelming, bringing feelings of chaos and what Seligman (2000) calls an experience of cosmic disruption (2000, p. 83), for what is at stake is a violation of meaning to one's sense of self.

2.4 Shame and agency

Tisseron (1992) approaches shame as a psychoanalyst, but for him too the emotional aspect of self is a determinant of social action – or inaction – and shame as a powerful emotion impedes entry into discourse with the outer world. If there is discourse, it is meaningless, empty or muted. Tisseron (1992) posits that shame has positive

consequences for social action and should be valued as a check mechanism because it guards the integrity of an individual immersed in a system with which it cannot identify (Tisseron 1992). An alternative type of coherence is produced – and trust is generated between in-groups who constitute a different kind of external authority for one another, or what Bickford-Smith (1999) calls moral virtue. Naidoo (2000), speaking about prisoners or people with infectious diseases such as leprosy, understands well the way in which in-group/out-group configurations are consolidated around shared differences (Naidoo 2000).

2.5 Gleichaltung versus embarrassment, criticism and insult

Positive social action enhances autonomy and freedom and introduces what has been referred to by Scheff (1990) as *gleichaltung* (1990, p. 76). This describes a state of being where cogs fit well into each other for the experience of mutual acknowledgement produces positive feelings, or *gleichaltung*. However, when social interaction results in embarrassment, criticism and insult, it produces shame, feelings that are counterproductive for social and economic wellbeing.

Citizens fighting the apartheid regime attempted to forge honourable identities and overcome feelings of shame, but they were systematically undermined and 'shame' was perpetuated. Shame was an advantage to the apartheid authorities for opposite attributes, such as honour (Lynd 1958) or pride (Scheff 1990), cemented relations and made people feel good about themselves. Network closedness or fixation was thus cemented during the struggle years and it was conflict rather than cooperation that brought people together (Rideaus 1998; Ruiters 1996; Marais 2001) as 'in general you trust people of your own kind and are suspicious against others' (Rideaus 1998). The honour or pride of activist leaders, and what Woolcock (1998) has referred to as 'bounded solidarity' (1998, p. 161) was constantly interrogated and threatened by apartheid authorities, and mistrust, shame and guilt were perpetuated through gossip and constant undermining of feelings of virtue and value. These tactics were construed to disseminate distrust and create confusion and fear.

The dimension of power is fundamental to our understanding of shame. As Pattison (2000) notes, 'the creation of strong authority is understandable but dysfunctional and alienating' (2000, p. 139), and shame has been noted as a 'perception of unacceptable

inferiority produced by a sense of dependence on one's employers or superiors....' (*ibid.*). According to Hardin (1993), it is experience that determines the 'psychology of trust' (Hardin 1993, p. 508) and, unsurprisingly, distrust is deeply embedded in the historical memory of the majority of citizens. It is the way in which distrust emerges amongst water users that matters to this study, and empirical data will illustrate the way in which transformation in the water sector is producing distrust and for some, shame.

What is important to studies on institutional change and transformation is that, according to Heller (1985) and Scheff (1990), the negative chain reaction is not transitory and it does not only impact on personal interactions in the social sphere. Because this attitudinal component of social capital has repercussions on larger systems and institutions (Heller 1985; Scheff 1990), it becomes an important analytic construct with which to consider transformation of systems and water management institutions.

2.6 Shame, identity and exclusion

The tensions between the cognitive and emotional aspects of self and its consequences for social action, described by Scheff (1990) and Heller (1986) above, are evocatively depicted by Zoe Wicomb (1998) in her article 'Shame and Identity: the case of the coloured in South Africa'. Saartjie Baartman was taken from her own country over two hundred years ago and displayed as a living – and later dead – exhibit in London and Paris. Her remains were returned from the Musee de Paris in May 2002, to her country of origin. This powerful icon of the Khoi 'Venus' serves as a reminder of what happens, in the extreme, when social capital is deliberately smashed and scattered.

If Coleman (1987), Warren (1999) and Mishler (2001) are correct that institutionalised distrust is a healthy manifestation in a democracy, then it is alarming how little disagreement, dissonance or debate takes place in the stakeholder forums and reference group committees that are part of the process of building the water management institutions in the Breede-Overberg WMA. What appears instead is a uniformity of trust on the formal level. Scheff (1990) notes that pride and shame are of low visibility (1990, p. 82) and Wicomb (1998) describes how 'it is the nature of

shame to stifle its own discourse'(1998, p. 92). Wicomb (1998) describes a condition which is contrary to trust, a condition where shared values are not openly brokered and people are in 'the ambiguous space between inside and outside' (1998, p. 104).[30] Although Turner (1974) constructs notions of liminality to describe ritual and meanings and metaphors of ritual, the notion of what he calls liminality or being 'betwixt and between' (1974, p. 232) is a useful way to understand space and social interaction that takes place outside the formal organisational structure.

The following evocative description by Wicomb (1998) describes shame as 'cross-eyed and shy, stalks the post-colonial world broken mirror in hand, reproducing itself in puzzling distortions' (1998, p. 92). The description is not only evocative but helpful for it gives insight into some of the 'puzzling distortions' that are apparent as the empirical data emerges. Dissonances become apparent in the in between spaces, suggesting that the formal space provided is unable to foster debate, questioning and dissent and that some individuals might be overwhelmed with shame. Fear of embarrassment, insult or criticism in water management forums could result in zero exchange and feelings of separateness from the 'mainstream.' Isolation or insecurity reinforces anomie.[31] This is a condition described by Leilde & Bekker (2003) in their article on local government and the way in which poor and rich alike experience local development: 'Their social exclusion however individualises and marginalizes them. Their voice is faint and of little influence .....their strategy, typically chosen on an individual basis, is one of opting out of civil society ...' (2003, p. 159)[32]

There are reasons for withdrawal and exit that have nothing to do with shame. For instance, a breach of trust can lead to exit, lack of interest in the cause of water reform and so forth, but the empirical evidence, particularly in Chapter Five presents a case for including shame in the reasons for non-participation. Within the analytic framework of Leilde & Bekker (2003), shame encourages

[30] Wicomb refers to the *stoep* or veranda that is outside the house.
[31] For a deeper discussion on anomie and atomie see Galtung (1996) who provides a macro-historical perspective of structural and cultural transformations and describes the process of destructuration and deculturation (1996: 379) and atomie and anomie in domestic society (Galtung 1996, pp. 379-413).
[32] Another reason for choosing to exit, argues Bekker, particularly relevant for those who have some alternative (middle-income group for example), is to have a voice and exert better control from without.

exit rather than loyalty as a person disengages from the discussions, silently or invisibly.

2.7 Shame, honour and knowledge

Vigilance and institutionalised distrust have been considered as an integral part of democracy and scepticism of authority a valuable democratic resource (Coleman 1987; Mishler 2001; Scott 1985; Offe 1997; Warren 2001). But disengagement and experience of shame reinforce social exclusion of some and inclusion of others and have a negative effect on democracy. The argument that is pursued in the interest of shame is that exclusion, from the dominant knowledge regime, reinforces a negative sense of self, entrenches feelings of shame and makes positive social action and participation difficult. As knowledge is crucial to secure control and meaningful participation, its political dimension cannot be underestimated. The observations presented in this study shows that the old water-user networks are not easily unstuck and new intra-group negotiations between water users are difficult.

2.8 Summative remarks on shame

Both Heller (1985) and Scheff (1990) recognise that a negative chain reaction occurs when the system is maligned and that it does not only impact on the personal – neither is it transitory, for it can, as already emphasised, have an impact on the larger systems and social institutions. Tisseron (1992) recognises that shame is brought about in a situation with others and it is not chosen but is inflicted (1992, p.15), and shame is accompanied by a feeling of emptiness and the negative perception that others have of self (*ibid.*). Power, present as the 'eye of the other,' and whether intentionally or not, triggers off feelings of shame that emerge when a member feels excluded (Tisseron 1992, p. 178).

Bearing in mind that shame is a 'puzzling emotion' and is somewhat 'recalcitrant to attempts at precise definition' (Epstein 1983, p. 1) it is nonetheless useful to present four distinct features that emerge from the discussion on shame:

1. External (cognitive) and internal (emotional) must be reconciled in order for an individual to experience a sense of self, autonomy and integration

2. Without a sense of self an individual cannot establish meaningful social bonds with others
3. Shame results in silence, retreat, exit, withdrawal or disengagement with the social realm
4. Shame is invisible but a critical determinant of social action

Four distinctive properties of trust were identified by Ostrom (2000) and were part of the trust discussion in the first part of this chapter. In these summative remarks on shame it is useful to link the four distinctive properties and in so doing to make the argument stronger for the inclusion of shame in trust discourse. The similarities between the two constructs, with the possible exception of the third property, are remarkable.

1. Like trust, shame does not wear out with use but rather with disuse
2. Like trust, shame is difficult to observe and measure
3. Shame is hard to destruct through external interventions
4. National and regional governmental institutions strongly affect the level and type of social capital available to individuals to pursue long-term development efforts (Ostrom 2000, p. 173)

The section on poverty as an impediment to trust produced evidence from theorists to support Woolcock's assumption (1998) that all forms of exchange are inherently embedded in social relationships (1998, p. 163), for instance that various forms of embeddeness influence opportunities and constraints that face individuals in their pursuit of economic advancement (Granovetter 1973; Woolcock 1998; Warren, 1999; Ingelhart 1999). Embeddedness, it was argued, carries both benefits and costs (Ruiters, 1996; Ridaeus 1998). The empirical data reflects on the costs of shame, and considers whether experiences of isolation and insecurity encourage people to seek comfort with the like-minded. The study considers whether and in what ways localism entrenches in-group/out-group dynamics. It is possible that feelings of shame ensconce isolation and insecurity that, in turn, perpetuate segmentation and network fixation and reinforce the 'dark' side of social capital. In order to avoid shame, Scheff (1990) proposes that individuals root themselves in social networks where they are with the likeminded and where they are less likely to feel embarrassment or ridicule.

If this is the case in reality, what conditions would be optimal for water users to 'feel good about themselves?' The theoretical arguments suggest that it would be very difficult for new social capital to be built and trust in strangers would be near impossible under conditions where water users feel heightened isolation and insecurity. The involvement and capacity-building of local stakeholders is a core component of reform in the water sector and is, as Gorgens *et al.* (1998) note, of paramount importance to the process.

Section Three: Participation

3.1 The rationale for participation

One advantage of decentralisation and localisation of decision-making is that this process, in the ideal, provides an opportunity to obtain knowledge of local resources. This suggests too that as Selznick (1949) proposed, localised systems can be more easily flexible to adjust to these conditions (1949, p. 27). The reluctance of some water users to attend or participate meaningfully in decisions around water might be helpfully understood within the context of shame, bearing in mind that if individuals are too embarrassed to speak, they will not participate. Non-participation would have an effect on the way in which the larger systems and institutions are constructed.

In an evaluation of participatory development, Glyn Williams (2004) identifies the publication of the World Bank's World Development Report 2000/1 entitled 'Attacking Poverty' as a marker that participatory discourse had moved from the 'margins to the mainstream' (2004, p. 557). However, Williams (2004) guards against enthusiasm in considering this an achievement for the cause of participation. For Williams (2004), unless the outcomes of participation are clear, although it has the potential to provide an opportunity to give a voice to the poor, it can also become a new form of subjection (2004, p. 559). In the context of the shame discussion above, water users who do not feel comfortable enough to contribute and who feel inadequate will not feel 'gleichaltung' but could well feel shame.

Does participation produce or inhibit the development of trust and does it, and if so in what ways, reinforce shame? The section on participation builds on the theoretical

arguments put forward in the preceding sections and introduces empirical evidence that integrates the previous arguments coherently

3.2 Contextualising participation

The devolution of decision-making to the local level is not unique to South Africa.[33] Over the past decades developing countries have focussed on the bottom-up dynamic of development, proposed as a replacement for failed top-down efforts that were supposed to but did not benefit the poor (Krishna 2002, p. 3). These concepts are not only unique to IWRM but are fundamental to democracy, a process that seeks to work closely with local citizens and communities to find ways of meeting their needs and improving the quality of their lives. Developmental local government, as per Chapter Seven of the Constitution of the Republic of South Africa, requires that local democracy be developed and promoted (Mogale 2001, p. 12). Warren (2001) Woolcock (1998) and Minogue (1998) confirm that the engagement of civil society is one of the key principles of good governance. Tapscott (1999) offers insights into ways in which South Africa has opted for deepening democracy at all levels of society and at the three tiers of government and feels, that by bringing government closer to the people the project of democracy would be easier (1999, p. 13).

3.4 People to pipelines

In the domain of water management, farmers are encouraged to manage their own irrigation schemes (Shah *et al.* in Faysee 2003).[34] DWAF (1994, p. 8) itself notes that the continent of Africa and the rest of the developing world littered with failed good intentions implemented by specialists (1994, p. 8). This participatory approach, that supposedly involves water users at all levels but specifically focuses on ordinary water users, is commonly accepted in developing and developed contexts (Ostrom 1996; Briscoe 1997; Farrington 1999) and developing countries have come to realise

[33] Decentralisation is a 'blanket term encompassing a number of subcategories: devolution (or democratic decentralisation), deconcentration and delegation' (Cameron 2003, p. 114). It is not within the scope of this work to discuss these differences and they are used fairly loosely. Decentralisation is therefore accepted as the 'blanket term' taking care to distinguish between the nuances that Cameron (2003) alerts us to. Oluwu & Wunsch (2004) define decentralisation reforms as 'legal acts and administrative measures that initiate a transfer of responsibility (authority), resources (human and financial), accountability and rules (institutions) from central government to local entities (2004, pp. 4-5).

[34] Principle One and Principle Two of the Dublin Statement on Water and Sustainable Development, 1992, in Faysse (2003).

that water is a multi-stakeholder issue. Agrawal & Gibson (1999), Ostrom (1996) and Serageldin & Grootaert (2000) contend that bringing communities who are closest to the resource into decision-making is essential for achieving sustainable solutions for natural resource management. This is because interested and affected parties are a viable mechanism to address the needs of people and the environment, and in this way to translate IWRM.[35] It is therefore a logical progression that has evolved from lessons learnt that the ideological phasing out of top-down strategies and the growing popularity of bottom-up processes encourages greater cooperation from local users (Cloete 2000; WRC 2003).

But in order for this process to be effective, not only must local level institutions have representatives from a wide spectrum of water user groups that are affected (Agrawal & Gibson 1999, p. 638) but, importantly, the representatives should be able to make choices and to voice these choices. Simply mimicking a process of localisation or integrated water resource management, as Lant Pritchett & Michael Woolcock (2003, p. 193) state in their article 'Solutions when the solution is the problem' is not the way to go. The domain of water has been dominated by a top-down supply-driven paradigm and this paradigm will not shift by simply adding people to pipelines. A radical appraisal of the paradigm itself is critical and is one of the tasks with which this thesis has been charged. This means that principles, such as those classified as an outcome of the Water Law Review Process and consequently enshrined in the National Water Act (Act 36 of 1998) and the Water Services Act (Act 108 of 1997), are not in themselves enough to secure transformation. More precisely, as Pritchett & Woolcock (2003) caution, it is not a matter of simply adopting the recognized notions of empowerment, participation, accountability, good governance and transparency but it is how this process is implemented that matters (Pritchett & Woolcock 2003).

[35] The Millennium Summit, New York (2000), the Second World Water Forum, The Hague (2000), the World Summit on Sustainable Development, Rio (2002), the UN Conference on the Environment and Development in 1992 that produced Agenda 21, Monterrey Conference: March 20002 , the Third World Water Forum, Kyoto (2003) and the World Summit on Sustainable Development in Johannesburg (2003) placed water high on the development agenda and advocated localised decision making. The Third World Water Forum in Kyoto focused more specifically on participation.

> ... any discussion about 'empowerment' or 'participation' or 'accountability' in general is bound for incoherence...there is tremendous controversy as to exactly how to bring about such institutions and organizations. Can 'participation' really improve outcomes? Will 'decentralisations' really bring government 'closer to the people? (Pritchett & Woolcock 2003, p. 204)

3.5 Trading outcomes for process

One of the core challenges facing DWAF in the task of transformation is the trade-off between rapid initial delivery on the one hand and greater levels of investment in social development and capacity-building on the other (DWAF 2001a, p. 14). It can be expected, because there is what Pritchett & Woolcock (2003) note as 'terrible disarray in the field' (2003, p. 193) that every catchment will have its own set of problems and solutions. The danger of simply fixing a problem of failed development without scrutinising the essential flaws in the failed system has already been noted (Pritchett & Woolcock 2003). But as the pages of this research unfold, it becomes evident that DWAF is struggling to replace the old paradigm and despite their own acknowledgement in the 1994 Water Supply and Sanitation White Paper (DWAF 1994) that increased sustainability more than outweighs the gains made from rapid early delivery (DWAF 1997), the fast-tracking of the CMA process appeared, until very recently, to be a priority.[36]

As the ideals proclaimed in the National Water Act (1998) become reality, DWAF is grappling to decipher what Desai (1994) has stressed as the essential new mechanisms that are pro-poor.[37] A brief detour to revisit the problematics in the trust construct that were outlined earlier is useful. Portes (2000), for instance, cautioned that trust

[36] This must be seen in context of the discussion presented in the concluding chapter. As Wester *et al.* (2003) state DWAF is placing greater emphasis on social mobilisation (2003, p. 805) that is leading to a slower implementation process. The work of these authors in the Olifants Basin, as well as the work of the non-governmental organisation, ACCORD in the Sand River Catchment of the Inkomati may well be different from that in the Breede-Overberg. The Inkomati and Olifants Basin have, for instance, mining and industrial sectors amongst others that dominate. Preliminary comparative work undertaken by the Water Research Commission (2002) suggests nonetheless that the Sand Catchment, where the NGO Accord has been responsible for public participation, is making concerted efforts to transfer knowledge and render more equal the playing fields – the exception rather than the rule.

[37] Poor includes poor in the resources to manage water and not only income flows. Oluwu & Wunsch (2004) describe the participatory budgeting process, originally developed in some Latin American cities such as Porto Allegre, that is now promoted by two World Bank initiated municipal development programs in Africa. A substantial part of the budget is subject to discussion and debate with members of the public organised by neighbourhoods or civic groups. (2004, p. 74). Importantly, according to Oluwu & Wunsch (2004) the decisions that are made in these groups are binding on local governments and they hold periodic audit sessions to ensure that their preferences are correctly reflected (*ibid.*).

risks becoming 'synonymous with each and all things that are positive or desirable in social life' (2000, p. 535), and Grootaert & van Bastelaer (2002) apprised that it is trying to be a catch-all concept but could end up catching nothing (2002, p. 5). A reminder too that Stiglitz (2000) advised that trust is a concept with a short and already confused history (2000, p. 59). Participation as a feature suffers much the same problem but it has enjoyed less theoretical rigour than the notion of trust. Yet participation is implicit in much of the social capital theory that has been presented here, for knowledge, power and inclusion/exclusion, that have everything to do with participation, are identified as critical components for better deciphering social configurations (Agrawal & Gibson 1999; Blomkvist 1995; Powell & Dimaggio 1991; Ellison 1997; Desai 1994; Offe 1999; Pattison 2000; Rose 2000; Selznick 1949; Selener 1997; Tisseron 1992). These themes are critical to the understanding of how social configurations constrict or construct new water management systems.

During the Water Law Review process both the Australian and the British models were considered to provide the best basis for implementing Integrated Catchment Management in South Africa (WRC 1996, p. 49). But government opted for the Australian approach which 'relies heavily on active community and stakeholder participation in natural resources management and decision making' (WRC 1996, p. 49). The Water Law Review identified a 'long-term process, where implementation is a gradual and slow process of learning, negotiation, planning and action' (WRC 1996 pp. 49-50) to be a disadvantage in the Australian model. Despite the adoption of the Australian model and DWAF's acknowledgement that development in the water sector should be demand driven and community-based (DWAF 1994), DWAF's emphasis has continued to be on delivery and on fast-tracking the transformation process, trying to get to 'Pretoria'[38] too fast. This decidedness has propelled the implementation of both the Water Services Act (delivery of water services) and the National Water Act (water resource management).[39]

A current research project, commissioned by the Water Research Commission (2003) and confirmed by theorists (Barbeton 1998; Kickert & Koppenjan 2001; Pritchett &

[38] Pritchett & Woolcock (2003) develop the analogy of a phantom state of Denmark, a desired destination.
[39] Reconsideration of the approach is part of the discussion followed in the final chapter of the thesis.

Woolcock 2003) stresses that participation is a process and it requires extra resources, special meetings, special efforts, time and energy and transport. The Development and Facilitation Act (Act 67 of 1995) and the White Paper on Local Government (1998) both insist that municipalities 'develop mechanisms to ensure citizen participation' (Hart 2002, p. 261). There are thus, as Hart (2002) stresses, mandated efforts to enforce participation (*ibid.*) and it this enforcement of participation that Newman *et al.* (2004) see as a shift towards more collaborative forms of governance (2004, pp 203-204). According to Newman *et al.* (2004) this emphasis is a result of the transformation of the modern state, shifting from that of governing through direct controls to that of governance (*ibid*). Newman *et al.* (2004) clarify that participation is more about questions of identity in a multi-cultural world than about representative democracy (2004, p 204).

3.6 Intended and unintended consequences of vagueness

Barbeton (1998) cautions about the vagueness of the terms 'participation' and 'empowerment' that have, according to Kotze (1998), been popularised in development discourse to the extent that they no longer have any particular meaning (1998, p. 85). Vagueness is worth scrutiny and vagueness of policy is, for instance, described by Selznick (1949) in his much-cited Tennessee Valley Authority (TVA) study. According to Selznick (1949) vague legislation is vulnerable to misinterpretation but also to manipulation by elites. It is worth examining a typical extract from the National Water Act (Act 38 of 1998) which betrays well the vagueness in the language, particularly disquieting around something as fundamentally important to the transformation process as citizen participation.

> Achieve representation of disadvantaged persons or communities which have been prejudiced by past racial and gender discrimination in relation to access to water ...the development of a catchment management strategy and the promotion of community participation in water resource management within its water management area and agreement on water-related matters from the various stakeholders and interested persons (Act 36 of 1998, Chapter 7 Part Two & Three)

Marais (2001) posits that the vagueness of the Act is not only incidental but a factor that he describes in '*Limits to Change*' that deliberately allows for concessions and compromises

> The settlement and the launch of the transition depended on an activated awareness of 'common interests' between the old order and the popular movement – on an acknowledgement that friend and foe have to pass through a gateway of concessions and compromises in order to avert disasters for the respective agendas (Marais 2001, p 95).

The vagueness in the Act creates enough space for interpretation where the common interests of both DWAF and an elite new order are resolved. Pegram (2001) asserts that the NWA was 'intentionally written as a framework act which allows considerable flexibility in its implementation (2001, p. 2). In line with GEAR policy, DWAF's vested interest is to reduce expenditure, but the stringent limits being placed on social spending following the shift from the RDP to GEAR focus puts a restraint on the involvement of communities and community organisations. The outsourcing of management functions and the creation of statutory body corporates such as the CMA or WUA are practical solutions that are in line with South Africa's current macro-economic policy. In 1994, with the decision to revise the Water Act (No 54 of 1956), government's purpose would understandably be to meet with least resistance from old order elites averse to change. Vagueness in policy is a solution that is sufficiently pleasing to 'friend and foe' (Marais 2001, p. 95).

Despite both rhetoric and legal reform that suggest that the democratization has seriously begun (Oluwu & Wunsch 2004, p. 3), ten years into the new regime transformation and democratisation in the water sector are by no means a given. Peters's (2002) examination of power and meaning in governance of common resources proclaims that there is an 'impoverished toolkit for examining social dynamics surrounding resource use' (2002, p.15). These insights are confirmed by other theorists who critically examine gaps between ideals of participation and the way that participatory processes are implemented in reality (Newman *et al.* 2004; Williams 2004; Parfitt 2004; Fergusson 2004). The empirical evidence is closely scrutinised to decipher whether it not it concurs with Peters's (2002) and others (Newman *et al.* 2004; Williams 2004; Parfitt 2004; Fergusson 2004) claims. As the social component is recognised as critical to the success of transformation in the water sector, underdevelopment in this domain would be critical.

The DWAF (2001c) position paper on the 'Establishment of Catchment Management Fora', cites 'mutual respect, compassion, comprehension and appreciation of fellow members' as crucial ingredients for achieving the 'common vision shared by all' (2001, p. 5). Not forgetting the propensity for dissent, debate and discussion (Warren 2001) the ingredients deciphered by DWAF (2001) are the axis on which trust amongst water users pivots. Certainly, they are ingredients that would be able to reverse feelings of social inhibition or what Kramer (2001) described as being in 'no man's land' (2001, p. 176) that marginalised water users might feel. Chapter Five is tasked with unpacking texts that reflect levels of social uncertainty and inhibition. It considers whether water users feel embarrassed and not appreciated for if so, there could be vicious cycles of exclusion that are reproduced.

3.7 Reflections on participation

The main aim of participation in the water sector is to transfer power, or at least to equalise power, between marginalised and elite groups. The stated purpose of these transfers is to offer sustainable solutions in the domestic realm, for instance to ensure clean drinking water for all and in the resource domain to ensure the 'protection, use, development, conservation, management and control of water resources' (Act 36 of 1998, Chapter Two, Part One).

The purpose of establishing a CMA is to 'delegate water resource management to the regional or catchment level and to involve local communities …' (Act 36 of 1998, Ch 7 Schedule 45). Schedules 2 and 3 of chapter 7 of the Act deal with the functions and operation of catchment management agencies and include the promotion of community participation. Chapter 8 of the National Water Act deals with water user associations and schedule 30 of that same chapter, ordains that WUAs 'operate at a restricted localised level and are in effect cooperative associations of individual water users who wish to undertake water related activities for their mutual benefit' (Act 36 no 1998, Chapter 8).

Many catchment fora have been established to promote the public participation envisaged in the National Water Act (Hart 2000, p 2).[40] Hart (2000) warns that the dominance of special interest groups in the current water policy landscape undermines the 'spirit and intent' of the fora (2000, p. 3) which have been conceived as 'interactive, multi-stakeholder bodies (2000, p. v).

The Breede River Basin Study, commissioned by DWAF (1999) as a precursor to the establishment of the CMA, describes public involvement as a golden thread that runs through the study. But public involvement is a vague term and DWAF's conflation of public participation processes with participation ignores the critical differences between different modes of participation. Farrington *et al.* (1999) in describing different types of participation make the following differentiations: 1) passive participation where people participate by being told what is going to happen or what has already happened, or 2) where people participate by giving answers to questions, and 3) interactive participation where people participate in joint analysis and are able to make decisions collectively and form new groups or strengthen old ones (Farrington 1999, p. 5).

The difference between 1) and 2) in Farrington's model of participation and 3) is vast. The third option is in line with Chambers's (1994) participatory rural appraisal (PRA) and participatory development methodologies that were seen as 'cementing' the place of 'participation' within the development pantheon (Williams 2004, p. 557). Ribot and Peluso (2001), in their theory of access, go further in their scrutiny of participation, for they examine not only the means but the outcomes and benefits in their theory of access. Ribot and Peluso's (2001) contribution is to locate the participation discourse within the broader social contexts of what they call 'non-place-based networks of social ties' (2001, p. 2) and to insist on access as a dynamic process which depends on an individual's place and power within the nexus of social interactions. Ribot and Peluso (2001) disaggregate access into ten relevant categories among which are access to authority, which shapes an individual's ability to benefit from resources, access to technology, which determines how easily a person can get from one place to another on roads, in cars etc; access to property, where ownership

[40] Position paper on 'roles and functional models for catchment fora' in a series of commissioned papers by DWAF.

of land becomes critical; and extra-legal access, which describes criminality for instance as a matter of perspective for government might 'legally' invoke forceful means to protect its own axis of authority (Ribot & Peluso (2001, p. 6). The benefits that an individual is able to accrue are directly connected to their access in these selected domains.

It becomes apparent when examining official DWAF policy documents that there is a tendency to conflate representation, public participation and participatory practice. This tendency is a symptom of what Williams (2004) sees as being increasingly written in to 'Southern Government (social) development projects' because developing countries are forced to follow suit with global international development trends (2004, p. 558).

As early as 1997, Rahnema (in Williams 2004) considered the concept of participation to have been politically 'tamed' (2004, p. 558). The rubber-stamping of water user associations that have seemingly, but not meaningfully, included outsiders is a good example of the legitimating functions that vague notions of participation have for mainstream visions of development (2004, p. 558). Yet, as Williams (2004) cautions, the feature should not be rendered impotent for it 'can provide its subjects with new opportunities for voice and its consequences are far from pre-determined (2004, p.559). Water users, such as those involved in the Duivenshoks and Ruensveld rural water schemes that is described in Chapter Five, gained benefits from their cooperative and reciprocal trust relationships – both within the farmer segment but also vertically between themselves and government – thirty years after they began to speak to one another as a result of the Soil Conservation Act of 1946. In other words, repeated interactions, cooperation, risks and uncertainties resulted in economic and social wellbeing. The advantage that the farmers have is an understanding of how government works, and the state had a vested interest in their wellbeing.

Although the right of people to participate in the planning, execution, maintenance and control of project (Desai 1994, p. 217) and decisions that affect their own lives is increasingly accepted as a good government agency or good governance (Desai 1994, p. 218), the achievement of this project is not easy. There are several problems with the notion of participation that range from a problem that practioners who introduce

participation tend to focus on the tools rather than the principles underlying their utility (Parfitt 2004, p. 551) to the fact that the tools are unrefined and undefined. The constitutional right of citizens to water, that underpins government policy in the water sector, is amputated for in itself it is insufficient to ensure meaningful participation. The remaining chapters reflect on the empirical evidence that was gathered in the Breede-Overberg and consider that policy, although a necessary ingredient, is sn insufficient driver of change. Chapter Five continues the discussion on knowledge, agency and power, three critical features of participatory processes and in so doing, allows for a better understanding of why this should be the case.

Summative remarks

This chapter has scrutinised the construct of social capital and in so doing has encompassed a wide range of themes that are relevant to the broader realm of development discourse. The themes of participation, inclusion, cooperation, reciprocity and agency are made more or less explicit by all the theorists discussed above and are at the core of the trust/shame debate. The absence of shame in the social capital debate is surprising, and the chapter has further developed the argument put forward in Chapter One, for its relevance to discussions of the cognitive or attitudinal component of social capital, trust. The following chapters of this thesis provide empirical evidence to suggest that the shame construct might provide helpful new insights into the process of reform in the water sector. In concluding this chapter, we remind the reader that the realm of ideas and concepts belongs to what Weber calls ideal types, and the distinctions are not as clear when 'seen' on the ground because of the tensions between between facts and values. Despite the disjunction between facts and values the study explores the appropriateness of a particular value or ideal to the facts. Both shame and trust are fluid and invisible constructs (Krishna 2002; Scheff 1990) and these constructs are examined through the eyes of the researcher whose impartiality is impossible. Nonetheless the theoretical constructs of social capital, embedded as they are in discourse concerning social interaction, are considered to be cardinal tools with which to unpack the transformation process that is unfolding in the water sector.

Water has many forms and many voices. Unhonoured, keeping its seasons and rags, its rhythms and trickles, water is there in the nursery bedroom; water is there in the apricot tree shading the backyard, water is in the smell of grapes on an autumn plate, water is there in the small white intimacy of washing underwear. Water – gathered and stored since the beginning of time in layers of granite and rock, in the embrace of dams, the ribbons of rivers – will one day, unheralded, modestly, easily, simply flow out to every South African who turns a tap. That is my dream.
Antjie Krog[1]

1. Introduction

The historical patterns of access to water and other areas of public service delivery were markedly skewed (Abrams 1996; Gorgens *et al.* 1998; MacKay 2003; DWAF 1994; Eberhard & Pegram 2000; Cloete & Wissink 2000). The role of the state, post 1994, is: 1) to examine allocation of water to the various sectors, urban and domestic, mining and industrial, irrigation and afforestation and environmental (Eberhard & Pegram 2000, p 4), 2) to ensure access to clean drinking water within 200 metres of the dwelling and 3) to build network reticulation systems as well as institutions to ensure delivery in order to redress the unequal distribution of water. These tasks are essentially of a technical nature and, although necessary, are not sufficient to redress the unequal distribution of water. In trying to redress the backlogs and meet the required standards DWAF's strategy has been first and foremost one of delivery.[2]

There are two core legislative frameworks for transformation in this sector, the National Water Act (Act 36 of 1998) and the Water Services Act, 1997 (Act 108 of 1997). The implementation of these and other policies contained in supporting documents are the responsibility of the Department of Water Affairs and Forestry (DWAF). The National Water Act governs the water resource; that is the rivers, streams, dams and ground water, while the second legislative framework, the Water Services Act, 1997, prescribes the distribution of water for domestic, business and industrial usage. Both Acts together provide for the establishment of institutions that are given responsibility for management and distribution of these services. The

[1] Source: http://www.thewaterpage.com/wp3.htm.
[2] The consequences of this approach are discussed in this and following chapters, but this approach is strictly contrary to both global and local rhetoric where the supply approach of the previous decades, seen as a solution for water scarcity, has been replaced by a demand-driven approach.

National Water Act and the Water Services Act, together with supporting legislation,[3] create an opportunity for water users who were not involved in decision-making processes prior to 1994 to interact with one another and define the institutional spaces for these interactions to take place. The objective of these acts is to attain equity, efficiency and equality in water matters as an 'iterative process' (DWAF 2002, p.12).

The discussion that follows in this chapter is organised under the following four headings: 1) the background to water which is further divided into three subsections: i) historical legacy, (ii) current geographical and social landscapes, and (iii) water and poverty; 2) policy context: legislative guidelines and policy documents. This second section of the chapter is further divided into four subsections (i) policy background including the two key legislative frameworks, (ii) the Water Services Act, (iii) the National Water Act with a discussion on the organisation of the water sector in South Africa and (iv) the National Water Resources Strategy; 3) policy aims and achievements. This part of chapter three is further divided into six subsections: (i) general, (ii) knowledge regimes, (iii) tariff and cost for water, (iv) local government, (v) urban versus rural water supply and a brief paragraph on (vi) water and trust. The chapter concludes with 4) summative remarks.

2. Background to water

Historical legacy

The various transmutations of apartheid, from its inception to the tricameral parliamentary and 'own affairs' administrations, eleven homeland territories, four independent TBVC states and six 'self-governing' areas (DWAF 1994, pp. 2-5), served to reinforce and maintain power and prolonged the delivery of water along clearly demarcated racial lines (*ibid.*). Investment in pipes, reticulation systems, dams, inter basin transfers and any provision of water

[3] Municipal Infrastructure Investment Framework, 1997, National Environmental Management Act, 1998 (Act 107 of 1998) and the National Environmental Second Amendment Bill, August 2003 (Government Gazette No 25289), Extension of Security of Tenure Act, 1997 (Act 62 of 1997), Local Government Transition Act, 1993 (Act 209 of 1993), Local Government: Municipal Structures Act, 1998 (Act 117 of 1998), Western Cape Planning and Development Act, 1999 (Act 7 of 1999), White Paper on Local Government, 1998, Municipal Systems Bill, Local Government Demarcation Act (Act 27 of 1998). Also relevant: White Paper on Integrated Pollution and Waste Management for South Africa, August 1998.

supplies predominantly served the white population of South Africa.[4] The underlying premise of water access, allocation and delivery was to support economic growth and foster the trust of a white electorate.

Water supplies and water-borne sewage services were provided to wealthy municipalities and towns along clearly designated racial white lines (*ibid.*). Water supply schemes were created to distribute water to industrial and agricultural sectors of the economy.[5] Black local authorities, with authority over the black townships within 'white RSA', suffered from inefficient management and lack of funding. Mutahaba *et al.* (1993) in their analysis of public administration in Africa, note that not much investment had gone into developing sophisticated administrative systems, leaving these structures as 'skeletal organisations' (1993, p. 6). Despite the allocation, access and delivery of water to whites, even white local authorities were considered inefficient (Cameron cited in Carmichael & Midwinter 2003, p. 119) and were largely controlled by central government (Carmichael & Midwinter 2003, p. 119). The principle of self sufficiency required that white local authorities kept separate native revenue accounts for black townships that were under their control (Carmichael & Midwinter 2003, pp. 116-117) and the townships and rural areas were largely left to fend for themselves (DWAF 1994, p. 5). The result of these political and administrative realities was an inequitable distribution of water.

[4] It is misleading to believe that apartheid constructed these divisions, as Marais (2001, p. 16) in his chapter 'Origins of a Divided Society' notes: the 'NP's policy did not rupture the country's historical continuum' and although it intensified the levels of oppression these had been built on foundations already present.

[5] In the Breede-Overberg area, water use is dominated by agriculture although the amount transferred to the Metro is also significant (Proposal Second Draft: October 2001, pp. 15-18) and not without contention. The tensions between the metro and the 'rural' area are discussed within the context of the state/citizen debate in Chapter Four. Two hundred and twenty four million m^3/a is transferred primarily for use by the Cape Town metro and irrigators along the Berg River and around Stellenbosch. Water is transferred to the Cape Metropolitan Area from the Palmiet River and to the CMA and the Berg River from the Theewaterskloof Dam. The main point here is that water allocation is determined by its financial value. More money is gained by selling water to Cape Town – at a higher cost than consuming it in the Breede – and, it is argued, the additional money goes towards funding the CMA costs.

[5] Agriculture represents close to 60% of the total water requirements in the country, followed by domestic consumption, 25%. Agriculture is seen to be an inefficient user of water – in other words the economic impact of water use in irrigation is substantially less than in other sectors (Conradie *et al.* 2001, MacKay 2003, DWAF 2002). However, as MacKay (2003) and DWAF (2002) note, agriculture provides employment (11% of total national employment. (DWAF 2002, p. 17). The NWRS (*ibid.*) notes that only 10-15% of the total agricultural employment is in irrigated agriculture. The impact of alien invasive vegetation in the Overberg area is severe. It consumed approximately 93% of all the water used in the Eastern Overberg and approximately 35% of all the water used in the Western Overberg where it used almost as much water as the irrigation sector. (Breede-Overberg CMA Proposal, second draft 2001, p. 17).

From the perspective of the Department of Water Affairs and Forestry, institutions to administer water supplies proliferated over the years, including parliament, provincial administrations, regional bodies, parastatals, sixteen water boards, many non-governmental organisations, both foreign and local, irrigation boards, metropolitan authorities and local authorities (DWAF 1994, p. 5). In addition, each of the ten homelands had their own departments of water affairs, public works, local government and agriculture. Together, hundreds of authorities and homeland structures had responsibility for water but failed to make resources available where they were most needed (*ibid.*). This view is corroborated by others (WRC 1998; Eberhard 1999; Eberhard & Pegram 2000) and although there were urban blacks, coloureds and Indians who believe that their needs were better catered to under the previous regime, there is little research in the water sector to support this view.[6] Although much of the data that is presented below is the view of the Department of Water Affairs or researchers working in tandem with DWAF, for the purpose of this thesis this general view is accepted, for what matters is that there are skews in water delivery and that these skews affect trust between water users today.

Current geographical and social landscapes

South Africa is a water-scarce country.[7] Water resources are unevenly distributed across the country and the country suffers from hydrological extremes (Abrams 1996; Eberhard 1999; DWAF 1997, 1986, 2000; Conradie, B *et al.* 2001). Approximately 12 million South Africans lacked adequate water supply at the time of publication of the DWAF 1994 White Paper and nearly 21 million lacked basic sanitation (DWAF 1994; Eberhard 1999).[8] Despite the reversal of the regime, as a middle- income country there are a significant number of people who are water-poor. Water supplies for these consumers fall short of the World Health Organisation basic requirements of

[6] Research in the water sector is largely commissioned by DWAF or the Water Research Commission and it is possible that failures to deliver are underreported. There have been critical evaluations on the failed delivery, for instance by Hemson (2003), but only anecdotal evidence has been presented that confirms the statement that delivery was better to coloureds and Asian/Indians under the old regime.

[7] The average rainfall for the country is approximately 450 mm per year which is well below the world average of about 860 mm per year (DWAF 2002, p.9).

[8] Conradie *et al.* (2001) provide an estimate of a little less, noting that 25% of the population are without adequate basic water services and that 50% of water service institutions are in financial trouble due to inefficiency and non-payment of services (DWAF in Conradie *et al.* 2001).

25 litres of water per person per day, or, as stipulated by the Reconstruction and Development Programme, 6000 litres per household within 200 metres of the abode.

Despite the complexity of the situation and the organisational reform required in the department, the policy of the DWAF, as stated in the 1994 White Paper, was "to ensure that all South Africans (could) have access to basic water supply and sanitation services within seven years or less" (DWAF 1994). By June 2003, DWAF's Minister Kasrils announced achievements by reporting that there were between five and six million households without adequate water supplies (DWAF media release June 2003).[9]

Residency overwhelmingly determines access to water today and although the social and geographical landscapes of apartheid are still apparent, they are most starkly represented in the urban/rural skews. Approximately 76% of those lacking adequate water or sanitation live in rural areas. Within urban areas in South Africa, water consumption is as high as in developed countries, but unsurprisingly, within the cities, there is uneven distribution (Eberhard 1999). Of the poor, 29 million, DWAF has served 12 million or 42%.[10] Another report states that by July 2002 a total of 7.2 million rural people have been provided access to potable water (at a cost of R5.5 billion) and that South Africa is on target to reverse the water backlog by 2008.[11] The report also cites a remaining water backlog of approximately 8 million people. In addition, an estimated 15% of clinics and 12% of schools lack water and sanitation (DWAF 2002).[12] Without water-borne sewerage the majority of the dwellings which lack adequate water supply use the bucket system, traditional unimproved pit toilets

[9] http://www.dwaf.gov.za/commuications/Press Releases/2003/ and *South African Race Relations Survey 2002.*

[10] www.dwaf.gov.za/Projects/ Official GCIS statistics that say 80% of all households had access to water in 1996 and 85% in 2001. The source of water is not stated: some are community taps, others taps on site and so forth. Issues of quality and access are not separated. Reportedly by the end of July 2000, DWAF had provided water for 5.8 million people at a cost of R3.74 billion rand. There are contradictions in the statistics and this has been noted by Hemson (2003) and by Eberhard (1999) who are concerned about the lack of coherent statistics. Within government, the GCIS and DWAF statistics contradict each other but so too do different sources within DWAF. As these figures do not necessarily reconcile with one another, they demonstrate the contentious and political dimensions of water. Ostrom (1996, p. 213) also notes the negative effect of unreliable data and the difficulty of obtaining 'accurate information about local conditions, whether on physical variables or local institutions.'

[11] *Ibid.*

[12] R30 million has now been allocated to DWAF for clinic sanitation programmes and R150 million for school sanitation (http://www.dwaf.gov.za/communications/Press Releases/2003/.

or the veld[13] (DWAF 2001) for sanitary purposes, none of which meets the basic functional, health and environmental requirements for an adequate water supply system. According to DWAF (2003) the target date for the eradication in 430 000 households of the 'despised bucket system' is 2006 (DWAF media release June 2003).[14]

Many factors have contributed to this landscape of deprivation; [15] primarily an absence of facilities and infrastructure resulting from South Africa's divided political past, a scarcity of water and the geographical mismatch of demand and supply for water (DWAF 1994, p. 4). But the scope of the water problem is enormous and the problem also includes budget shortfalls, insufficient care regarding knowledge transfers, poor management and ignorance of the consequences of this in time and money, together with a lack of sustainability of completed projects. The solution to these problems involves the resource management and construction of appropriate institutions to ensure the governance and distribution of the available water (Turton 2003).[16] In 1999, DWAF aimed to reach two million people per year for the next six years at a cost of R500 million per year, with total projected spending between 2000 and 2005 of R3 billion. The Integrated Rural Development Strategy (IRDS), launched by the President's office in November 2002, estimated that one billion rand was needed to bring one million people clean water.[17]

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[13] Open defecation.

[14] http://www.dwaf.gov.za/communications/Press Releases/2003/.

[15] Although the Breede WMA, the focus of this study, is located in the Western Cape, the wealthiest of all the nine provinces, the situation is no different in this province. For example, according to the preliminary phase of the Breede River Basin in 1999, over 10 000 people have sub-standard water supplies mainly in the following towns: Ashbury, Rawsonville, Rolihlahla.

[16] DWAF organised a two day symposium to brainstorm the problem of water management institutions at Willow Park conference centre in Johannesburg (April 2004) with the purpose of addressing the problem of institutions and management of water.

[17] *Finance Week* September 23–29 in 1993 estimated R13 billion in capital and almost R600 million in recurrent expenditure. According to this source, this would provide water to 3.2 million urban homes and 1.6 million rural households and sanitation to 3.4 million urban units and 1.9 million rural homes. The MIIF five-year estimates for total investment requirements were R35 billion to R50 billion for all water and sanitation services and R23 billion to R33 billion for water services only. In order to achieve this goal, the DWAF indicated that the annual budget of the newly created department must be increased from R1,6 billion per annum (1,28% of the total operating budget) to R2,8 billion (2,24%). This 1% increase in the national budget over seven years, together with housing subsidies, should allow the Department to provide universal basic water supply and sanitation services to all citizens (DWAF White Paper 1994). Minister Kasrils in his budget vote address (June 2003) proclaims that DWAF has provided for R1.2 billion for new water supply and sanitation infrastructure and R116 million for refurbishment with another R210 million in the next two years. R93 million has been set aside for capacity-building and R25 million for strengthening DWAF's oversight role. (http://www.dwaf.gov.za/communications/ Press Releases/2003/). In addition, the 2001 White Paper on

Water and poverty

The economic and social effects of water delivery are interconnected[18] and there is not only a strong link between 'water poverty' and 'income poverty' (Sullivan 2002, p. 1) but also between social resources and water scarcity. According to Turton *et al.* (2003), as water is ultimately basic to all human existence, cooperation in this domain can achieve political gains, and these authors note that *waterschappen* (loosely translated as 'water cooperatives') became the very foundation on which democracy grew in the Netherlands' (2003, p. 14). Insufficient or inadequate water supply can mean inefficient economic impact where water is of poor quality, unreliable or too costly.

In the 1997 White Paper, DWAF notes that sufficient affordable clean water for hygiene purposes should be seen as part of the primary health-care service (DWAF 1997). The potential health, social and economic benefits of improved water delivery are clear, given an estimated 1.5 million cases of diarrhoea reported in children under the age of five every year in this country (DWAF 2001a). Inadequate sanitation is a health problem (DWAF 2001a)[19] and it also has serious socio-psychological problems that impact, particularly but not exclusively, on the elderly, on women and children and on household members who are in poor health already.

Empirical evidence reflects the relationship between shame, inadequate water and/or inadequate sanitation, for the inability to maintain bodily hygiene, for instance, has been known to bring shame to households, and in some instances feelings of shame are so intense that households have been known to 'drop' out of social activities altogether.[20] Water scarcity also reinforces skews and discrimination, particularly

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Basic Sanitation states that households in formal townships have access to a one-time housing subsidy of R16 000, now increased to R20 300. This subsidy allows the recipient to buy land, build a house and provide essential services such as potable water, sanitation and electricity. Individuals who have informal land rights to the property they occupy may also qualify for this subsidy (DWAF 2001a). This is accommodated in terms of the National Housing Programme referred to as Rural Subsidies: Informal Land Rights. However, in the case of rural homes, this subsidy does not include water and the cost of delivery to rural towns remains high and often unaffordable.

[18] Numerous available household survey datasets link socio-economic wellbeing to access to water: For example: Langeberg Survey: SALDRU 1999, Project for Statistics for Living Standards and Development: SALDRU 1994. Clark and Qizilbash (2001) rank water as the fourth most important value for wellbeing.

[19] http://www.unesco.org/water/wwap.

[20] The White Paper (DWAF 2001) acknowledges that inadequate sanitation has negative social and psychological impacts and that it is the elderly and women who are particularly inconvenienced. Data

against women and children (UNICEF 2001).[21] Extending adequate access to safe water supplies is the most important contribution to equity that a government can make and should be prioritised (World Bank in Eberhard & Pegram 2000, p.10). The full health benefits of DWAF's programme of water delivery can only be maximised when all three services, namely sanitation, waste removal and hygiene promotion, are provided (*SA Waterbulletin*: March/April 2001).

The lack of available water has increased the vulnerability of poor households. Despite significant advances in the modification of the Municipal Infrastructure Investment Framework (MIIF), the inefficiencies of the apartheid spatial form have slowed down economic development. This has happened because those households that have been poorly serviced have suffered reduced business opportunities and stifled productivity both in terms of reduced nutrition and income flows (Eberhard & Pegram 2000, p. 21).[22]

As economic production is stifled by poor access to clean water, electricity, sanitation, etc. so too poor access to knowledge and information entrenches poverty and has been shown to exacerbate feelings of exclusion, mistrust and shame. Linkages and social networks and the relationship of these to economic production are highly relevant in the context of this thesis, for access to knowledge is an important

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collected during the evaluation of sanitation projects on behalf of the Impumelelo Innovations Award Trust, during the period June 2003 – September 2003, has shown that some household members' withdrawal from religious activities is directly related to inadequate water and sanitation. Members report being ashamed to bring congregation members home 'when it is their turn to do so' (Collaboration between the International Food Policy Research Institute, the University of Natal and the University of Wisconsin drawing on the 1998 KIDZ 2 survey). Feeling dirty and 'not to wash yourself because there is no water near the dwelling' enhances feelings of unworthiness and unsociability and has been found by these studies to exacerbate feelings of social exclusion.

[21] In 1997, consultants working in the water sector in a communal area outside Johannesburg reported that a child was physically abused by his parent because the child had used water to wash his hands after his mother had walked for two hours to fetch water (Unicef 2001). The basic need for water is not met, and hygiene and health practices are curtailed. The child was not using water for recreational purposes.

[22] Urban renewal plans include incorporation of water services as an essential component of job creation and economic upliftment. Abalimi Bezekhaya, 'The People's Garden Centre,' in Khayelitsha serving 2000 gardens, is an example of an NGO focussed on economic production within constraints: no water, poor soil conditions but high quality vegetables and nutrition for families. Water scarcity – as well as poor soils – is an impediment to gardening and production of home-grown nutrients, thus perpetuating a vicious cycle of deprivation, hunger and vulnerability to opportunistic diseases.

factor, shaping who can benefit from which resources (Ribot & Peluso 2001).[23] As the empirical data in this thesis demonstrates, trust in government is closely linked to delivery of safe and adequate water – and sanitation – at affordable costs to households.

Positive democratic effects cannot be maximised unless there is adequate information and knowledge so that people are able to make informed decisions about issues that affect their lives (Warren 1999; Goldin 2003; Miller 1993) and change the patterns of who has and who does not have water.[24]

3. Policy context: legislative guidelines and policy documents

Policy background

The first policies to make a break with the past were contained in the Reconstruction and Development Programme that was published as a key pillar of the ANC election manifesto in 1993 and became the official policy of government in May 1994 (Eberhard 1999; White Paper 1994). The 1994 Water Supply and Sanitation White Paper (DWAF 1994), entitled 'Water, an indivisible national asset,' identified the need for government to create a sustainable policy on water supply and sanitation, and although a water and sanitation paper, the bulk of the paper dealt primarily with the provision of water. In the 1994 White Paper, DWAF's recognition of unequal access to basic water supply resulted in a formulation of preliminary guidelines which were drawn up in accordance with the Reconstruction and Development Programme (MacKay 2003; DWAF 1994).[25]

The paper did not introduce a strategy *per se*; instead, it outlined the areas where policy would be formulated in the future and national guidelines would be drawn up, entailing a 'major review of the Water Act No 54 of 1956' (DWAF 1994, p.2). The 1994 White Paper discussed the legacy of the apartheid years, notably the absence of

[23] Ribot and Peluso (2001) point out that the term access is frequently used when referring to property and natural resource analysts or by other social scientists, without adequate definition. Their paper 'A theory of access, taking property out of place', seeks to 'map' relationships of access.

[24] Miller (1994) in particular proposes a 'prolonged phase of education and consultancy.' He speaks of the community as clients who should be satisfied by the agency. In other words, until the transfer of knowledge has been completed, the negotiation between client and agency remains deficient.

[25] The International Drinking Water and Sanitation Decade of the 1980s also influenced the way in which policy was designed (DWAF 1994).

a clear, coherent policy prior to 1994, institutional fragmentation within governing bodies, and a lack of political will to address the water problem.[26] It aimed at remedying the inequalities in water allocation of the past and in particular aimed to resolve issues of property rights to water, later resolved in the National Water Act (Act 36 of 1998) where all ownership rights were vested in the state (Conradie *et al.* 2001). It was followed by the White Paper on a National Water Policy for South Africa (DWAF 1997) and the White Paper on Basic Household Sanitation (DWAF 2001).

The policy principles underlying the 1994 White Paper are as follows (DWAF 1994):

1. Development should be demand-driven and community-based
2. Integrated planning and development
3. Basic water is a human right
4. 'Some for All' rather than 'All for Some'
5. Equitable regional allocation of development resources
6. Water has an economic value
7. User-pays principle
8. Environmental integrity

The foundations for a sound institutional structure to support the transformation must be consistent with the provisions of the Constitution and with the eight principles that have been outlined (DWAF 1994, p. 9). As the role of government changed, the Department stressed that all communities in the country should have access to basic services but were eager to point out that although they would support provincial, local government and 'other' agencies (such as, for example, water boards), this did not imply that the supply of basic services was the direct responsibility of the Department (*ibid.*). The key to sustainable water and sanitation development, emphasised in terms of Section 126 (1) of the Constitution of South Africa Act 1993, is the existence of functional and competent local government (DWAF 1994, p. 11). Schedule 4 of the Constitution of the RSA (Act 108 of 1996) vests the responsibility for water, limited to potable water supply systems and domestic waste water and sewage disposal

[26] Note also Evans (1997) who refers to the 'native administration' and makes the point that apartheid came about through piecemeal problem-solving within different parts of the apartheid bureaucracy.

systems, in local government.[27] Section 146 of the Constitution makes the role of the state explicit and provides scope for national government to develop national norms and standards for functions that fall under Schedule F of the Constitution.[28]

The Bill of Rights contained in the Constitution proclaims the following basic rights that are important to the water sector in general and fundamental to the new democracy: the right to equality, the right to dignity and life, the right to an environment that is not harmful to health or wellbeing and, importantly, the right of access to sufficient water and food and to primary healthcare services (Eberhard 1999, p. 27). The National Water Advisory Council was established in November 1994 and the Water Laws Rationalisation and Amendment Bill were passed which provided for localised statutory water committees. Based on the changing role of the State and the rights ordained in the Bill of Rights, in order to redress the water problem, a national panel began the water law review process in 1994 with the aim of drafting a new Water Act (WRC 1996, p. 11).[29] The panel drew up a set of 28 principles, approved by Cabinet in November 1996, which formed the basis of the new water legislation (MacKay 2003, p. 52; Gorgens[30] *et al.* 1998, p. 7).[31] An important step was to create a new department that would reverse the legacy of apartheid, specifically the institutional fragmentation, inherent confusion and resulting political inertia of the past. The Department of Water Affairs and Forestry was created on 1 July 1994 with

[27] A brief note on water use has not yet been provided and is useful for the reader. MacKay's (2003) discussion adopts the 11 different kinds of water users that require authorisation according to Section 21 of the National Water Act. These are: storage and abstraction of water; impeding or diverting the flow of water in a watercourse; discharge of waste or heated effluent either directly to a water resource or in a manner which may impact on a water resource; alteration of the bed, banks, course or characteristics of a watercourse; removal and disposal of underground water (primarily related to mine dewatering); recreational use of water resources; stream flow reduction activities; and controlled activities. (MacKay 2003, p. 54). Discussion Document 2 (Bruwer 2000) divides water users broadly into three sub-divisions. 1) Consumptive and non-consumptive users, 2) users whose actions 'degrade water quality and those who do not' 3) purpose for which water is used.

[28] In order to link the financing, funding and implementation of water programmes, the 2001 White Paper suggested that the Integrated Development Planning (IDP) process, introduced by the new local government statutes as the appropriate mechanism to aid municipalities, set priorities and coordinate service delivery. Within the IDP, the Water Services Development Plan (WSDP) should provide the basis for water and sanitation provision and operation (DWAF 2001a). Municipalities are now required to prepare Infrastructure Investment Plans (IIPs) regarding existing and proposed levels of service to households, health and hygiene education to be provided and estimated capital and recurring costs. However, the IDP process requires local government to budget and source funding in order to implement water programmes.

[29] Chaired by Geoff Budlender, the Water Law Review Panel met 13 times over a three-month period.

[30] Part one. The guidelines for catchment management are divided into three parts. Part one discusses the conceptual and institutional context of catchment management.

[31] Also http://www.the waterpage.com/wp3.htm.

responsibility for consolidating all water and forestry-related departments, budgets, personnel and functions previously in existence (DWAF 1994). Given the immensity of the task, the Minister of Water Affairs and Forestry, Kader Asmal, anticipated that it would take 18 months to two years to form the new department (DWAF 1994, p.1). The objective of the Department is to develop 'not only a new organisational structure but also a new ethos and vision' (DWAF 1994, p.2).

The Water Law Principles were approved by Cabinet in 1996 (*ibid.*) and were to become enshrined in the National Water Act two years later. The five most significant principles are summed up in the following table (MacKay 2003, p. 52)

Table Four: Five Water Law Principles

Principle no	Principle
3 & 4	The abolition of riparian water rights and private ownership of water.
7	Establishment of 'environmentally sustainable social and economic benefit' as a key criterion for water resources management and allocation decisions.
16	Provision of the use of economic instruments in the management and control of pollution.
24	Beneficiaries of the water management system should contribute to the cost of its establishment and maintenance.

The two key policy and implementation mechanisms, the National Water Act (Act 36 of 1998) and the Water Services Act (Act 108 of 1997), were based on these principles (MacKay 2003, p. 52). Other key processes that informed these two core legislative frameworks are presented in the flow chart below:[32]

[32] For additional supporting legislation see also footnote one.

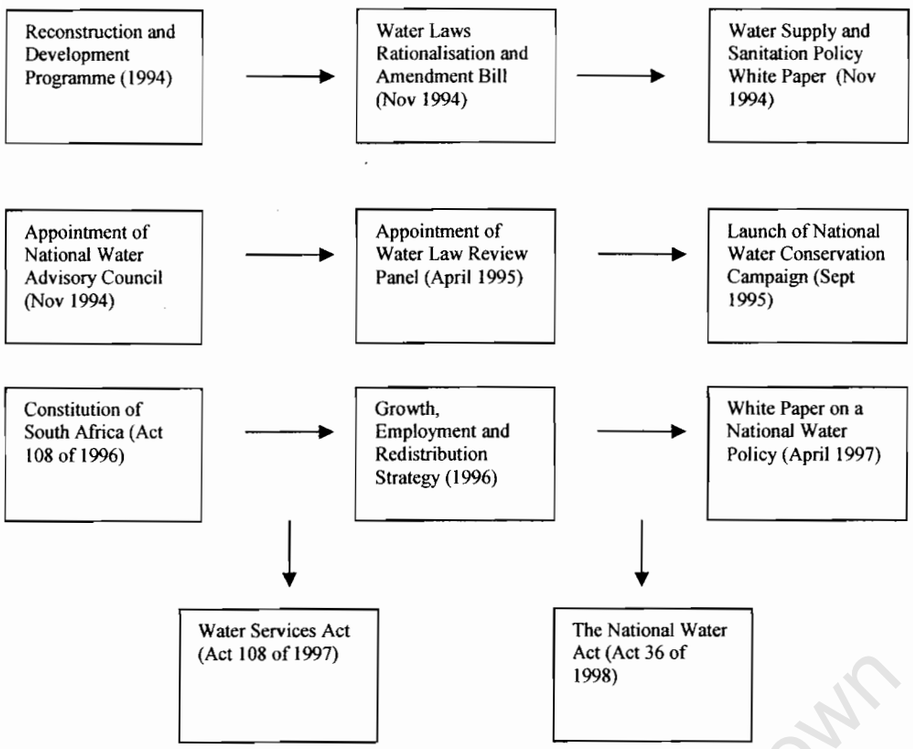

Figure One: Relevant legislation

The 1997 White Paper on a National Water Policy (DWAF 1997) notes that sufficient affordable clean water for hygiene purposes should be seen as part of the primary healthcare service (DWAF 1998). Concerns about water services cannot be isolated from related areas of health, hygiene, housing, education and the environment. According to MacKay (2003):

> The 1997 White Paper on National Water Policy (DWAF 1997) represented a key milestone in the process of reform of the water sector as a whole, and it will have far-reaching effects on social, economic and environmental issues in South Africa as it is implemented over the next 20 years (MacKay 2003, p. 49).

The reason for this is that it was the first policy document to integrate the principles and objectives of the new water law, in line with the Constitution of South Africa and the Growth, Employment and Redistribution Strategy (GEAR) that had been

introduced in 1996. The National Water Act and the Water Services Act are the primary implementation mechanisms for this policy (MacKay 2003, p. 52).

Water Services Act

The Water Services Act of 1997 states that local government would be the implementers and the authorities for the provision of water services.[33] Local government has a duty:

> To all consumers or potential consumers in its area of jurisdiction to progressively ensure efficient, affordable, economical and sustainable access to water services (Act 108 of 1997 Chapter Three 11 (1)).[34]

Local municipalities are responsible for the provision of water services and for implementing water improvement programmes at the local level.[35] Provincial and central government institutions, the private sector and NGOs are also considered vital stakeholders, and should facilitate water development through financing, consulting, technical assistance, construction, training, capacity-building and education on health and hygiene matters.

The policy principles underlying the Water Services Act are:

1. The rights of access to basic water supply and basic sanitation to ensure sufficient water.
2. The rights of access to basic water supply and basic sanitation to ensure an environment not harmful to health or wellbeing.
3. All spheres of government to ensure that water supply services are provided in a manner that is efficient, equitable and sustainable.
4. All spheres of government must strive to provide water supply services and sanitation services sufficient for subsistence and sustainable economic activity.

[33] Amongst others, relevant supporting policy: Water Services Act, 1997, Local Government Municipal Systems Act, Act 32 of 2000 and the Local Government Municipal Structures Act, No 117 of 1998

[34] Schedule 4 (Part B) Section 151-156 of the Constitution of South Africa allocates the responsibility and function for the provision of water supply and sanitation services to municipalities.

[35] Some of the important reasons are to maintain efficient pricing structures and minimise leakages. For instance, the power of consumers to influence water pricing has been demonstrated in Los Angeles and Tucson in the US (Eberhard 1999, p. 66) and Mexico (Wester *et al.* 2003).

5. All spheres of government must observe and adhere to the principles of co-operative government.
6. That the delivery of water services must be undertaken in a manner consistent with the broader goals of water resource management.
7. The interests of consumers and broader goals of public policy must be promoted.
8. National government is custodian of the nation's resources.

The Water Services Act, 1997 (Act 108) deals with the distribution of water for domestic, business and industrial use and with the institutions that are given responsibility for managing and distributing services. It legislates the municipal function of providing water supply and sanitation services.

The Water Service Act provides for the rights of access to basic water supply and basic sanitation. It sets norms, tariffs and national standards that provide the framework for water services development plans (WSDPs), thus providing a regulatory structure for water services institutions and water services intermediaries. This Act provides that every water service authority must prepare a water services development plan (WSDP) for its area of jurisdiction as part of the Integrated Development Plan (IDP) process.

The Water Services Act gets its mandate from Section 27 of the Bill of Rights in the Constitution which says that 'everyone has the right to have sufficient food and water'. This Act does not deal with the allocation of water. It does, however, give local or district authorities the ability and authority to manage their own water supply. Municipalities can act as Water Service Authorities (WSAs) and as Water Service Providers (WSPs) or they can subcontract this function to water boards or another service provider to ensure the provision of water to their consumers (DWAF 1997). Although the Water Services Act includes measures to promote water conservation and demand management its primary function is to deal with water services and supply for rural areas and towns under municipal jurisdiction.

The Water Service Act also redefines the roles of water boards whose main task is to 'provide water services to other water service institutions within its service area' through selling bulk water.

Sections 9 and 10 of the Act regulate the volume of water that has been set as the target for 'basic' level services of households – currently 6000 litres per month per household. Section 4 (3) ensures that poor households will not be deprived of water services because they are poor, for when proven that 'he or she is unable to pay for basic services' they should not be denied water (DWAF 1997).[36]

National Water Act

The 1998 National Water Act further emphasises the policies that were laid out in the 1997 White Paper on a National Water Policy. It is more explicit in its design of a full-scale national water programme, indicating that the future programme would attempt to develop the necessary implementation strategies to meet the basic need of all citizens within ten years, according to the policy principles presented in the 1997 White Paper. The Act stipulates that the 'water resources of the Republic must be protected, used, developed, conserved, managed and controlled' in an equitable and sustainable manner.[37]

The vision of the National Water Act is declared in the Department's slogan 'some for all for ever'. The primary principle identified in the Water Law Review process is that development should be demand-driven (DWAF 1994), and instead of developing new resources water conservation and management of existing resources takes priority (DWAF 2002, p. 6; MacKay 2003). It is this principle that has been used to determine how priorities will be set and decisions made to maximise the benefits of the water programme. According to MacKay (2003), at the time of its release, the National

[36] Further discussion on the issue of rights and payments to water follows under the subsection on costs and tariffs in this chapter.

[37] Chapter 2, Part 1, Section 5 (3). These six themes are recurrent in government rhetoric. See for example the Introduction to the National Water Resource Strategy by the Minister of Water Affairs and Forestry, August 2002, and the opening speech by Director-General Muller at the Water Management Institutions Symposium at Willow Park Conference Centre in April 2004.

Water Act was considered one of the most progressive models for water reform in the world (2003, p. 53).[38]

Organisation of the water sector in South Africa

By incorporating principles three and four of the Water Law Review, the National Water Act separated land and water rights, and this was unprecedented in the history of South Africa.[39] Water has been declared a national asset and private water rights no longer exist.[40] It was recognised that naturally occurring water usually can be effectively and efficiently managed only within a river basin or catchment area, because of the need to manage, or at least account for, all aspects of the hydrological cycle (BRBS 1999; MacKay 2003; WRC 1996).[41] The country has been divided into 19 water management areas (WMAs). The establishment of WMAs and their boundaries is a component of the National Water Resources Strategy in terms of Chapter Two, Section 5 (1) of the National Water Act.[42] The institutional arrangements laid out in the plan for the management of these nineteen water management catchments have been specified in great detail by the DWAF in the National Water Act, Chapters 7 and 8.

The WMA is a large-scale area defined by macro-hydrological boundaries and provides the geophysical framework for national water planning as defined by the National Water Resources Strategy (BRBS). Catchment Management (CM) as prescribed by the National Water Policy:

[38] According to MacKay (2003), 'one of the first pieces of legislation in the world to provide for this water as a right rather than as an allocation' (2003, p. 60).

[39] Roman Law adopted the concept of *dominus fluminis* which made the distinction between private water and public water but determined that the right to the use of public water was vested in the state. The British introduced the principle of riparian rights which gave riparian land owners the right of use of public water and replaced the *dominus fluminis* principle (DWAF 1994). As MacKay (2003) points out, the riparian laws were suitable to a country where water flows are regular but they are not suitable to the semi-arid South African climate (2003, p. 57). Water law was first codified in a number of Irrigation and Conservation Acts between 1906 and 1912. The 1956 Water Act (Act 54 of 1956) retained the riparian principle (DWAF 1994). Government Notice No. 1352, 12 November 1999, National Water Act, 1998 (No. 36 of 1998): Regulations require that a water use be registered and make it impossible for water to be privately owned.

[40] Chapter 4, Part 8, of Act 36, 1998 establishes a procedure for compulsory licences for all water use.

[41] The WRC (1996) defines the catchment area as 'the drainage basin of a river, and its boundaries are demarcated by the points of highest altitude in the surrounding landscape. It is adjoined by other catchments and its geographical area covers all of the land which drains into one river system, from its source to its estuary' (1996, p.19).

[42] See Sections 5 (2)-(5) in Government Gazette No 19182, but also relevant are the Catchment Management Strategies as laid out in Sections 8 and 9.

> ...is simultaneously a philosophy, a process and an implementation strategy to achieve equitable access to and sustainable use of water resources by all stakeholders at catchment, regional, national and international levels while maintaining the characteristics and integrity of water resources at the catchment scale within agreed limits (WRC 1998, p. 5).

The guiding principles of the National Water Act are designed to promote social and economic development through the use of water and recognise the need to establish suitable water management institutions in order to achieve this purpose. These WMAs will therefore be governed by a Catchment Management Agency (CMA),[43] a self-governing body corporate. DWAF's role in pioneering and promoting the establishment of CMAs and water user associations (WUAs) that inform them, is pivotal.[44]

As the National Water Act recognises the need for consensual participation by relevant stakeholders, both in government and civil society, and that the previous delivery systems produced low trust (Gorgens 1998, p. 4) it reinforces notions that water provision should not be viewed as 'top-down'. Section 79 in Chapter 7 prescribes that the catchment management agency, while performing its duties, must 'be mindful of the constitutional imperative to redress the results of past racial and gender discrimination and to achieve equitable access for all..... (Act 36 of 1998, Chapter 7 Section 4 (a)) and it includes vital stakeholders who can and should contribute to the effective delivery of water and the management of the national asset. It must 'strive towards achieving co-operation and consensus in managing the water resources under its control' (Act 36 of 1998, Chapter 7, Section 4 (b)).[45]

DWAF's role is central to the success of the transformation.[46] Of the key institutional transformation requirements, as stipulated in terms of Section 98 (4) of the National Water Act, the transformation of irrigation boards into water user

[43] Sections 72, 73 and 151 (1) (1) of Schedule 3 in Chapter 17 of Act No 36, 1998, set out the powers which may be exercised and duties to be performed by CMA on assignment of delegation. This discussion is followed through in Chapter Four of this study.
[44] Chapter 8 of the National Water Act, Act 36 of 1998, establishes the procedures and powers of Water User Associations.
[45] Chapter Five offers a critique of this – suggesting that the protection of civil society is inadequate and 'vague'.
[46] Debated more fully in Chapter Four

associations is also paramount.[47] Clearly, as the chapters that follow elaborate, this process has not yet been finalised.

DWAF's intention in the National Water Resource Strategy is to lay out the practices of various government departments by designating the roles and responsibilities of all stakeholders and providing a means of coordinating these efforts.[48] Importantly, the intention is to ensure that those who have been excluded from decision-making processes would be drawn into the forums responsible for water management. The National Water Policy rests on the concept of integrated water resource management (IWRM) on a catchment basis and the National Water Resource Strategy must *promote the management of catchments within a water management area in a holistic and integrated manner* (Schedule 6 (1) (l) Act No. 36 of 1998).

National Water Resource Strategy (NWRS)[49]

The National Water Resource Strategy (NWRS) is the implementation strategy for the National Water Act but it is a 'dynamic document, which will continue to grow and change as the needs, capacity and understanding of our people change' (DWAF 2002 (a)).[50] The development of the National Water Resources Strategy is the responsibility of DWAF. This large-scale strategy must ensure that plans are in place to prevent any region suffering water shortages or poor water quality. It must also ensure ecological water requirements and protect the interests of international neighbours. The four main objectives of the strategy are:

- To establish the national framework for managing water resources
- To establish the framework for the preparation of the catchment management strategies
- To provide information
- To identify development opportunities and constraints

[47] ... the period for transformation into a Water User Association by Irrigation Boards in terms of section 98(4) of the National Water Act, 1998 has been extended to 31 August 1999. (BRBS 2001)
[48] Chapter Five engages in more depth in the problematic notions of participation, community and stakeholder that are seemingly 'uncritically' applied in the policy rhetoric. For this discussion see also Agrawal & Gibson 1999, Benjaminsen *et al.* 2002, Peters 2002, Eade 1997, Ribot & Peluso 2001 and Selener 1997.
[49] The NWRS is scheduled to be released in April 2004.
[50] Introductory remarks by the Minister of Water Affairs and Forestry, Ronnie Kasrils, August 2002.

Subject to Section 5 (4) (a) of the National Water Act the NWRS must :

> Set out strategies, objectives, plans, guidelines and procedures of the Minister and institutional arrangement relating to the protection, use, development, conservation, management and control of water resources ….' (Act No 36 of 1998, Schedule 6 (1) (a)).

The NWRS provides data on natural mean annual runoff and the ecological reserve and on the available yield for each WMA as well as the water requirements for each WMA (DWAF 2002, pp. 15-18). It provides strategies to balance supply with demand – 'a reconciliation of the available water and total requirements for the year 2000' (DWAF 2002, p. 19).

4. Policy aims and achievements[51]

General

Water policy in South Africa is undergoing a process of 'rapid and significant evolution' (Eberhard & Pegram 2000, p. 28). In an attempt to redress the apartheid skews, water policy is directed at improving conditions amongst the poor, mainly those living in rural communities of the former homeland areas and in informal settlements. Although the concern for scarcity of water as well as access and rights to water is appropriate, inadequate attention has been given to equal access and control over water (Wester *et al.* 2003). Many water users are more restrained by a lack of means to take water from its source rather than lack of rights of access to water (*ibid.*).

Following global trends in watershed and catchment management (Agrawal & Gibson 1999; Farrington 1999; Fayssee 2003; MacKay 2003; Wester et al. 2003), and in accordance with the principles of the South African Constitution, the water policies that have been introduced are aimed particularly at the provision of opportunities for participation of all South Africans where government takes up the responsibility for 'leadership and guidance rather than control' (WRC 1996, p. 7). The objective of the water policies is to redress the inequalities of the past and ensure that all South

[51] Policy – as defined by Coning (2000) – is 'a statement of intent' (2000, p.3).

Africans have access to clean drinking water. At the same time, these policies ensure the Reserve for the environment, not considered before as a consumer in its own right, has the first claim on the resource (Eberhard & Pegram 2000, p. 33).[52] The ecological Reserve represents the minimum quantity and quality of water that must remain in the system to ensure that at all times it is able to recover to, or maintain, an 'acceptable level of ecosystem health' (Beuster 2001, p. 24).

Gorgens *et al.* (1998) provide detailed guidelines for participation in the catchment management process and state:

> ...This includes changing people's behaviour, tapping into their energy and resources, empowering them to take control of their neighbourhood environment, and owning the catchment management process and its implications. Together with involvement, capacity-building of the stakeholder representative is of paramount important to the process, because informed participation will lead to understanding and informed decision-making, which will facilitate effective implementation and administration (Gorgens *et al.* 1998, pp. 6-7).[53]

The Water Act, and its accompanying policy documents, provide the legislative framework required for authorities to clear the water backlog, ensuring that all citizens have a basic level of water service by 2010. DWAF states that it may be possible to achieve this target by 2008, but in practice the timetable has been shifted out to provide an additional two-year window.[54]

The National Water Act, evaluated within the context of the other policy documents, provides a clear direction for water delivery in the intervening years. It is difficult to ascertain numerically what has been accomplished in the nine years since the first White Paper was introduced. [55] Although there is a policy focus on the poor, the

[52] The environment should not be considered a competitor for use as it is the base from which consumers are able to draw water.
[53] Part 11: Guidelines for the catchment management process (Gorgens *et al.* 1998).
[54] Discussion DWAF Provincial Office: February 2004.
[55] *Indicator SA*: Volume 17, No 4. This review is critical of government figures and the contradictions that are inherent in them.

dissonances between the policy rhetoric of the Department of Water Affairs and Forestry and policy implementation are apparent. The hard-won democratic rights that are embedded in the South African Constitution are not easily translated in the domain of water management. Wester *et al.* (2003) and MacKay (2004) are right in saying that the core vision encapsulated in the Constitution becomes more 'fuzzy' as the level of implementation is moved outwards from principles through policy '…making co-operation and alignment across sectors at the lower (local) levels that much more difficult' (MacKay 2004, p.3).[56] Gorgens *et al.* (1998) also identify the fragmented resource management initiatives as problematic, for instance the land-care movement, driven by the Department of Agriculture, and the establishment of conservation and conservancies, driven by the Department of Environment Affairs and Tourism and the Parks Board (1998, p. 8). The new Draft White Paper on Water Services attempts to tackle head-on some of these problems and like the National Water Resources Strategy makes more explicit the linkages between water resource management and water services and between civil society and government.

According to Farrington (1999), Miller (1993), Ostrom (1996), Levi (1996) and the World Bank Development Report (2003) international best practice has demonstrated that communities who are involved in the decision-making process are willing to commit to the maintenance and operations involved with water management, including responsibility for financial aspects of the service. Institutional reform that embraces the notions of political-administrative capacity and democracy at the local level is considered critical to the delivery process (*ibid.*). But although international lessons in development are persistent that successful development, particularly in rural areas, requires participatory mechanisms and that local needs should be considered a central part of planning (*ibid.*),[57] this is not always the case. Theoretically, this focus has the potential to enhance cooperation and common understandings around water and to consolidate shared norms and values that exist

[56] See also footnote 31 and related text. Froestad (2003) speaks of the 'long history of pillarisation' which he defines as a 'tendency of various professions and agencies to work in silos' (2003, p. 30).
[57] The South African Water Law Review process involved research into international examples of integrated catchment management, in particular: Australia, North America, United Kingdom, France and other African approaches, where there was more limited success to resolve these issues at the time of the review (1996, pp. 32-48).

between water management systems (Farrington 1999; Levi 1996; Ostrom 1996).[58] Pollard & du Toit (2003), Desai (1994) and others (Agrawal & Gibson 1999; Robins 2002) are attentive of the multiple interests and contested meanings that are all too often sidestepped in 'participatory' approaches, for most only theoretically place stakeholders at the centre of the planning and management process.

In South Africa, the present continuation of the technological regime that is structurally connected to urban development, industry and commercial farming is dominated by discourse that was part of the apartheid water regime. This was a regime that fostered fear and distrust in rural populations, homelands, townships and amongst farm workers on large commercial farms (Marais 2001; MacKay 2003). Deepening democracy at the local level and including ordinary water users in decision making processes provides, in theory,[59] an opportunity to build trust between water users and between water users and government.

Importantly, the new Draft White Paper on Water Services includes Section 4.7, entitled 'the role of civil society' (DWAF 2002b, p. 27), and although this notion of inclusivity was expressed in the previous policies the linkages between a 'durable democracy' and a 'strong civil society' are now made explicit.

Knowledge regimes

With the emphasis on participation, one of the key challenges is to 'level the playing field amongst users' who are notably heterogeneous (Faysee 2003, p.2). But it is unrealistic to accept, as has been proposed by many, that users would, or indeed should, all gain the same level of technical and specialised expertise (*ibid*). It is realistic and desirable, on the other hand, to ensure that water users who do not have the habit of discussing water matters amongst themselves, become involved in the process (*ibid.*). It is also realistic and desirable to ensure that different segments of

[58] The problems in achieving participation and inclusivity are at the core of the discussions followed in Chapter Five, but Chapter Four, the role of the state in producing trust, is also relevant here.

[59] Note the cautionary warning by development practioners, e.g. Pollard *et al.* (2003), working in the Sand subcatchment of the Inkomati Catchment portrays the gap between policy ideals and their practical effects. Agrawal & Gibson (1999) reconsider the role of community in natural resource conservation in their article entitled 'Enchantment and disenchantment' and explore the conceptual origins of 'community.' Varughese and Ostrom (2001) believe in institutions and rules of the game and that these provide, or do not provide, opportunities to bring communities into decision making processes.

water users exchange their respective and distinct knowledge regimes and skills base in the domain of water management (Miller 1993).

The different visions and notions of water – and how these notions affect participation and issues of equal access for water users – are obscured in Western conceptions of water that identify water within a framework built on 'scientific' technology and economic classifications of nature (Miller 1993). For some water users, water is predominantly 'untamed' while for others it is conceived in terms of a 'tamed' resource.[60] Within the Western knowledge regime, water is measurable and water systems and progress in the domain of water are considered in terms of domination and control over nature (Kotze 1997). Yet for other water users, water remains natural and wild or 'untamed' and access to it is considered erratic.[61]

These cultural differences are important for they convey information about the maintenance and adaptation of social systems to the environment and in particular to water (Kotze 1997). People who come together to discuss water matters assume and are often unaware of their own cognitive assumptions that then guide and inform their decisions and are closed to realities that are different.[62] The knowledge regime that dominates the water sector is also focussed primarily on the environment – and the consumption needs of the ecological reserve are consequently adequately and eloquently represented through specialists in the water management institutions. As the empirical evidence comes to light, it reflects on the many domestic consumers and some small-scale farmers who are frustrated in their attempts to protect their

[60] Anthropologists, for instance, Levi-Strauss (1987) have long been interested in the ways that people organise their universe through myths and rituals that give meaning to an otherwise chaotic universe.
[61] White farmers speak of dams, weirs, canals, boreholes which are important to them. Their references to water are organised in terms of organising supply and taming water, by building another dam, redirecting a canal and so forth. Yet even these terrains and understandings are contested as the 'irrational' understandings of springs, weather or water are found amongst 'commercial' farmers where there is evidence of suspicion and distrust that is irrational and idiosyncratic. Acknowledgement in particular to Tim Huisamen in the Department of Afrikaans at Rhodes University for his insights into belief systems of the Afrikaner, 'ons bybel, ons taal en ons land' (our bible, our language and our land) which contain distinctly 'irrational' understandings of the way in which the universe is organised. In the same way, and importantly, there is deep rationality at the base of 'non-Western' or non-technological views of water where, as the empirical data in Chapter Four suggests, water users manage and organise water and have a deep understanding and mastery of the environment.
[62] Closedness and fixation are discussed in some detail in the theoretical analysis but, as is evident in these discussions, closedness does not encourage the building of trust or social capital amongst water users. The symbolic representation of organised and rational thinking in water matters (obvious in many water management meetings) is evident in the use of cartography, the choice of specialist input from engineering professions, agenda content and so forth.

consumption needs, and this has negative effects on the building of trust between consumers.

Prior to 1994, environmental issues were of low priority and narrowly defined as nature conservation.[63] Although the definition of the environment has expanded to include people, there has been a failure to integrate environmental concerns into economics whose focus is on efficient use of scarce resources and equity. The ecological Reserve, required to protect aquatic ecosystems, is important to ensure future generations' access to scarce resources as well as to ensure financial gain through tourism. The importance of the aquatic ecosystem was manifest in the South African Water Quality Guidelines (DWAF 1996) and 'found its way, after much heated debate, into the Water Law Principles of 1996' (MacKay 2003, p. 59).[64] According to MacKay (2003) the National Water Act was one of the first pieces of legislation in the world to 'provide for this water as a right rather than an allocation (2003, p. 60). Water policy focus on human health is overshadowed by concerns for environmental aspects of biodiversity, coastal management, industrial pollution and conservation of natural resources.

The intended institutional systems propose to facilitate the effective, sustainable and accountable management of water resources for the country and balance the national strategic issues with local ones (Eberhard & Pegram 2000, p.ii). An important function of the Department of Water Affairs and Forestry, as custodian of the nation's water, is to determine that water is allocated with equity – while offering sustainable solutions – between different interest groups. But the mismatch between commercial or industrial water allocation, agricultural usage (Beuster 2001) and the allocation for domestic consumption remains. Despite legislation to the contrary, water for agricultural use and stock farming is used in large volumes. Many poor communities

[63] During the 1990s the Rio Earth Summit 1992, Second World Water Forum, The Hague 2000, Third World Water Forum, Japan, Monterrey Conference, March 2002, Johannesburg Summit on Sustainable Development, 2002, Kyoto Forum, also the Millennium Development Goals and in particular the Agenda 21, linked the environment to poverty and development.

[64] An informative discussion with Bill Rowlston during the Willowvale symposium, April 2004 in Johannesburg, indicated that in the same way that this aspect of the environment was considered the 'stepchild' of the environment and did not feature in water discourse, so too people are not yet 'taken seriously.' Bill Rowlston, DWAF's Policy & Strategy Coordination manager.

have not been able to take advantage of their 'right' to primary water supplies (DWAF 1994).[65]

Tariffs and cost for water

The 1994 White Paper stated that free basic water should be provided to the very poor in South Africa, and despite the clear policy, that no one will be deprived of basic water supplies, all poor people have not been able to benefit. The Equitable Share subsidy, obtained through direct intergovernmental transfers, covers the cost of free basic services to the very poor. Since early 2000 DWAF has been investing in the process but it was only in June 2003 the Cabinet approved a three-staged Free Basic Water Implementation.[66] The amount of free basic water referred to in the paper is 25 litres per person in line with the World Health Organization's guideline on minimum daily water required for drinking, washing and personal use. This has been increased to 6000 litres per household within 200m of the dwelling. However, the need for water is higher as this estimate does not include water for home-grown vegetables and neither is it sufficient to respond to special needs for the sick, particularly relevant in the light of the HIV/AIDS crisis (CCRS 2004, p. 9). Comparative analysis of international experience suggests that an average domestic consumption of between 100 and 200 litres per capita per day is sufficient to maintain a high standard of living (Eberhard 1999, p.1).[67]

[65] A significant addition to the National Water Act and later the 2001 White Paper is the introduction of monitoring and evaluation of national programmes. A series of broad categories are identified, from which the key performance indicators are yet to be developed (DWAF 2001a). Data collection and measurement, particularly at the local or municipal level, is expected to form an integral part of the performance-monitoring and evaluation of policy implementation.

[66] http//www. dwaf.go.za/FreeBasicWater/DefaultHome.asp. The legal framework for implementation of Free Basic Water is that of tariff-setting which is guided by the Constitution Act (Act no 108 of 1996), the Local Government : Municipal Systems Act (Act no 32 of 2000) and the Water Services Act (Act no 108 of 1997) (DWAF 2001, p.8).

[67] Such an 'average' level of consumption is already attained in South Africa's major urban areas. But note too the skews within the urban sites are pronounced and along racial lines. Also across towns. Eberhard says, for example, in Grahamstown average domestic consumption is very low while in Gauteng or Cape Town it is average and compares with developed countries. In his budget speech on 6 June 2003, Minister Kasrils announced his vision of a 'water ladder' and that government is not content to simply provide the basic requirements but that 'the promise for the next ten years is to move up the ladder, from communal taps to the convenience and dignity of having water in people's own yards with each household having its own toilet and even, in time, hot and cold running water inside the house enjoyed by many more of our people. That's what I mean by climbing the water ladder.'(http://www.dwaf.gov.za/communications/Press Releases/2003/).

Although the right to basic water services is 'not an absolute right, it is subject to the state taking reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights' (DWAF 2002b, p. 33), there are expectations of the ANC that it is a 'caring' government and that it should be providing water and services to all (Fjeldstad 2003; Ruiters 1996) and as Tapscott (2002) notes:

> ...the state' (in the form of Bantustan administrations) was seen to bring rewards to those who supported the government in power. In a democratic state, run by a popular government, it is readily assumed, rewards in the form of jobs, housing and services should be forthcoming (2002, p.2).

The multiple and conflicting roles of the state in water delivery continue to stimulate heated debate in South Africa and are particularly apparent in the area of water pricing and tariffs.[68]

> More recently statistics collected by the Department of Provincial and Local Government (DPLG) showed 133 456 water disconnections in the last quarter of 2001. This translates to a (conservative) estimate of 500 000 people affected by water disconnections over a three-month period. (McDonald: June 2003. *Sunday Independent*).[69]

A sound tier[70] tariff policy ensures recovery of full costs associated with water resource management and infrastructure development (Eberhard & Pegram 2000; Eberhard 1999) that is aimed at reconciling notions of equity and basic needs. The user pays approach, based on neo-liberal policies supported by the Growth, Employment and Redistribution (GEAR) strategy, is aimed at cutting government expenditure and reducing budget deficits (Carmichael & Midwinter 2003, p. 122). Tariff reform in developing countries requires guidelines and tools that establish an appropriate equity framework as there is a lack of consensus among policy-makers and local municipal officers on the meaning of equity (*ibid.*).

[68] Debate about water cut-offs and water tariffs between DWAF and civil society: see *Sunday Independent* June 22-July 15, 2003 and *Nothing for Mahala*, Centre for Civil Society Research Report no 16.
[69] David McDonald is the co-director of the Municipal Services Project.
[70] First tier: the use of water from the water resource (all ground and surface water 'extracted' from the environment and bulk raw water schemes managed by DWAF). Second and third tier water is treated water that is supplied in bulk (often by water boards) and then distributed to municipalities (for individual consumers). Source: Eberhard 1999.

The lack of knowledge and awareness of water management has consequences in terms of human and financial capital.[71] Under-investment, for instance, in the reticulation system leads to water leakage (Conradie et al. 2001)[72]and delivery that is too hurried compromises sustainable solutions.[73] Although inroads have been made – 30% of people had inadequate supply of water near their homes in 1994, reduced to 20% in 1997 (Marais 2001, p. 190) – there were thousands of water cut offs every month because users were unable to pay for these services (Marais 2001, p. 190).[74] The South African Municipal Workers' Union (SAMWU) reported that as many as two million of the water taps installed were not working properly (cited in Marais 2001, p. 191).

In an attempt to appease the public, DWAF has adopted a 'name and shame' strategy for municipalities that fail to implement Free Basic Water to ensure that all consumers will have access to water and that municipalities must provide this service.[75] But this

[71] According to a parliamentary media briefing between Dr Hemson of the HSRC, KzN, and Minister Kasrils, DWAF, in September 2003 56% of RDP projects (sample of 113 projects where 23 were selected) that were surveyed by the HSRC were not working, but Dr Hemson said that of the projects that were not working he was not looking at the infrastructure. The problem was that people were still further than 200 m away from a standpipe. A highly developed infrastructure could be underutilised. On the other hand, a three-phased project might be regarded as complete after only one or two phases were done.

[72] In some contexts within South Africa, there is as much as 40% unaccounted-for water and unnecessary losses. Source: Eberhard 1999, p. 15).

[73] See footnote 60. But also note, involving communities in projects has been identified as critical but is all too often sidestepped. A pilot project, by Sandra Spagnol, submitted as an engineering thesis for the University of Toulouse and the University of Natal, Durban (May 2003), examined the status of roof tanks in the EThekwini Municipality area of Cato Manor. Although the sample was small, a disconcerting trend emerged, indicating that more than half of the consumers interviewed had bypassed or completely removed roof tanks and made illegal connections directly to the water main, thus benefiting from a full-pressure level of water service while only paying for a semi-pressure level of water supply.

[74] According to a report released in July 2001, there were 10 million South Africans who have had their water cut off for non-payment of bills (McDonald in Centre for Civil Society Research Report No 16, 2004, p. 5). See also Centre for Civil Society Research Report, No 16 (2004), 'Nothing for Mahala.' The report is written by the Coalition Against Water Privatisation and the Anti-Privatisation Forum. It covers in considerable detail the effects of forced installation of prepaid water meters at Orange Farm, Johannesburg. 'Nothing for Mahala' translates as 'Nothing in life is free.' Minister Sonjica, in her budget speech, vote no. 34, in the National Assembly in June 2004, said that the main reason for cut-offs was not the supply interruptions. Sonjica announced at this occasion that R265 million is included in the annual budget for local government support and capacity building and that 'it will be supplemented by generous donor funding.'http://www.dwaf.gov.za/Communications/MinisterSpeeches/2004 BudgetVote17June 04.doc.

[75] Minister Kasrils's June 2003 budget vote address: http://www.dwaf.gov.za/communications/Press Releases/2003/. 4 (3) (c) of Act 108 of 1997 says that procedures for the limitation or discontinuation of water services 'must not result in a person being denied access to basic water services for non-payment.'

will not solve the problem of non-payment. Certainly, as Eberhard & Pegram (2000) note, the positive health externalities associated with investment in water services suggest a rationale for government subsidisation of basic water services (2000, p. 14). On the other hand, as Eberhard and Pegram (2000) also note, the external costs need to be costed into the price of water (*ibid.*). Some feel that it is government's responsibility to provide water without charge, but as was stated as early as 1994 in the White Paper, 'this is incorrect and is leading to serious financial problems and the possible interruption of services' (DWAF 1994, p. 23), and DWAF urged 'such communities' to resume payment (*ibid.*). These problems place additional burdens, such as high costs in water pollution, maintenance and infrastructure, on already overburdened delivery authorities. With the establishment of 'A Pricing Strategy for Raw Water Use Charges (DWAF 1999) the statutory framework for financing catchment management has been set (DWAF 2001a): the financial viability of the proposed Catchment Management Agency (CMA), the governing authority for a water management area, is dependent on 1) the willingness by the users to pay the water resource management charges and 2) the extent to which government commits subsidies for the CMA.

The following diagram provides a useful overview of the water cost and pricing chain that is at the centre of so much debate and distrust between consumers and government at all tiers:[76]

[76] Source: Draft White Paper on Water Services 'Water is life, sanitation is dignity,' the financial framework. Draft for public comment: 2002 from http://www.dwaf.gov.za/docs/Oth.PDF.

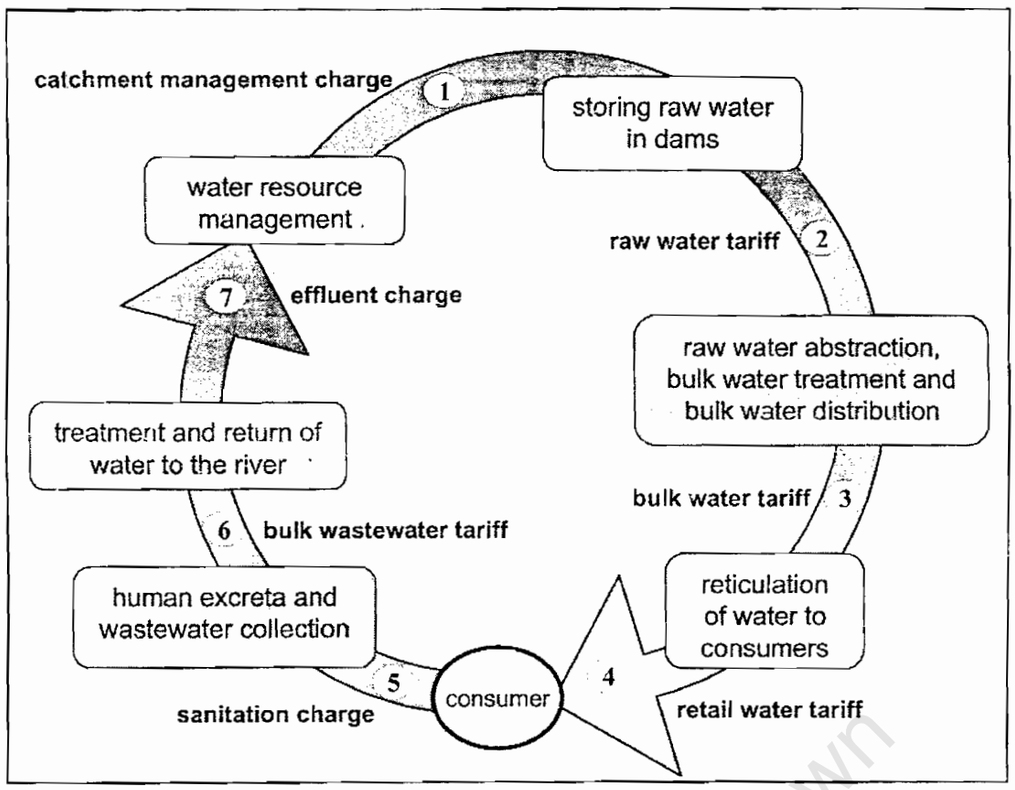

Figure Two: Water Issues Overview: Source: DWAF 2004

The core tensions between water as an economic good and water as a public good are yet to be resolved, but the present debate on the non-payment of services is twofold with a distinction drawn between those who are able to pay, but don't, and those who are willing to pay, but can't. Rural households, shouldering two-thirds of the poverty burden in South Africa, are unlikely to be able to pay for services.

> Assuming that expenditure of less than 5% of expendable income on water services is affordable, less than 5% of black households in South Africa can afford the full cost of a high-use-in-house water connection and only some 15% of black households can afford the full cost of a moderate-use- in-house water connection.... more than 80% of households can afford the operating and maintenance costs for an off-site water supply and about 70% of households can afford the operating and maintenance costs of a yard tank supply (Eberhard 1999, p. 4).

As already stated, the right to basic water services is 'not an absolute right. It is subject to the state taking reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights' (DWAF 2002b, p. 33). The aim of cost recovery is for consumers to pay partially, if not fully,

for services rendered. The government's Masakhane campaign,[77] launched in 1995, was 'intended to be an education programme to persuade residents to pay their charges, along with the improvement of services' (Cameron 1999, p. 250; Hart 2002, p. 246), but it did not solve the problem. Interestingly, Conradie *et al.* (2001)[78] argue that the poor might be willing to pay and to pay more than suspected, a view that is reinforced by the proliferation of informal water vendors in Africa and elsewhere (*ibid.*). Furthermore, evidence from developing contexts[79] indicates that the worst possible approach is to regard poor people as having no resources as this treats people as objects rather than subjects of development. Nevertheless, promises of free services for all have in practice usually resulted in some service for a few and little or none for most (DWAF 1994, p. 7).

Importantly, studies have found that poor communities experience a higher prevalence of disease, especially preventable and infectious diseases such as malnutrition, diarrhoea and tuberculosis.[80] As cholera is contracted from faecally contaminated drinking water or food, there is a high risk of cholera in the absence of appropriate facilities for water and waste disposal. A range of related issues are also responsible for waterborne diseases, such as contamination of ground water or water blockages that are a cost hazard to municipalities and a health hazard to people.[81] The only sure means of protection against cholera epidemics are adequate water supplies. Addressing the issue of poverty in South Africa cannot be delinked from redressing

[77] Neil Mcleod in his presentation at the Cape Town International Convention Centre in May 2004 reported on recent research that revealed 10, possibly even only 5, out of 150 municipalities are financially sustainable and of these only 70% of money that is owed is collected. He reported that 'many municipalities collect virtually nothing. Bills rise because people don't pay. There is bribery, corruption and municipalities disconnect because they are desperate." Mcleod also drew attention in his speech to the fact that there are 10 000 child-headed households in South Africa. The impact of HIV/AIDS on payments is critical. Neil Mcleod heads Water Services at the eThekwini Municipality in Durban. eThekwini has been reported as one of the most successful municipalities and, according to Mcleod, it is difficult to perform the duties that have been designated to local municipalities.

[78] Conradie *et al.* 2001. They propose that as a 'rule of thumb' households can afford to spend about 2-3 percent of their income on water. See footnote 72.

[79] Abidjan 1990, New Delhi 1990 and Dublin 1992 in DWAF 1994, p. 7.

[80] Hemson 2003 determined that the 'immediate precipitating factor for the rapid spread of the cholera epidemic was the disconnection of a rural community from a supply of clean water for not paying a connection charge.'

[81] An outbreak of cholera in KwaZulu-Natal in 2000-2001 led informed critics to believe that the outbreak would force the DWAF to review its policy and implementation strategy. At the peak of the epidemic, 1 500 cases were reported each day. (Holtzhausen 2002) In fact, approximately 118 000 cases of cholera were reported and nearly 265 deaths resulted from the epidemic. This was the worst cholera outbreak in South Africa in 18 years. Currently there are heated debates between government and civil society on water cut-offs.

the uneven distribution of water facilities. There is suspicion and distrust amongst many water users around DWAF's strict enforcement by local government of the 'user pays' principle and the setting of tariff structures at the municipal level compounds the problem.

Local government

The Second World Water Forum (WWF) in March 2000 highlighted the complexity of the challenges facing developing countries striving for effective governance of water (Wester *et al.* 2003). In line with global trends of environmental awareness, South Africa today places more resources and effort on integrated sustainable development.[82] Despite mounting efforts to focus on environmental integrity, the pressure on the infrastructure of cities and the challenges that local government face to deliver services are increasingly complex. The assignment of delivering water demands that public servants perform a wide range of activities. Local government has traditionally been weak in delivering services and in particular in servicing the poor in South Africa; yet the fundamental shift in institutional arrangements, as a result of changed government policy, places more emphasis on local economic development.

In terms of the national policy framework national government has the constitutional responsibility to ensure that local government is capacitated. Although provincial government has the constitutional mandate to take responsibility for services, clearly, the Integrated Development Plans (IDPs) and the Integrated and Sustainable Rural Development Strategy (ISRDS) have placed the onus of delivery on local government whose function as water services authority has been defined in the Water Services Act of 1997 (Eberhard 1999; Conradie *et al.* 2001; DWAF 1997, 2002). The right of local government to set the tariffs is also established in the 1998 White Paper on Local Government.[83]

[82] The definition offered by the WRC (1996) is 'sustainable development can be defined in broad terms as development which meets the needs of the present without compromising the ability of future generations to meet their own aspirations and needs' (1996, p. 9). One of the outcomes of the summit was that the United States committed $970 million over the next three years on water and sanitation projects and the United Nations an extra $20 million in resources for water and sanitation, to be distributed particularly amongst the rural poor of developing nations.

[83] But note that national government sets the tariffs. These contradictions are not always reconciled.

Given South Africa's political history, local governments are in varying stages of development, from non-existent in certain areas to effectively functioning institutions (Tapscott 2001; White Paper on Local Government 1998). But according to Tapscott (2003), 'in its totality, local government in South Africa is in crisis' (2003, p.3)[84] and Oluwu & Wunsch (2004)[85] proclaim that they lack the authority and the resources proportionate to the problem they face (2004, p. 7). One of the problems in implementing the water policy is, as Mutahaba *et al.* (1993), speaking of African local government, notes, that local governments do not have the capacity and where they do, are often overpowered by government officials who are in higher places. Coning (2000) identifies the dissonance between top-down and bottom-up approaches and contends that the legacy of top-down ruling and style of government was part of the regime which lacked legitimacy at the grassroots level and it meant that change was not jointly planned (2000, p. 88) and that this might impact on the project of trust.

Because, according to Tapscott (2002, 2003) municipalities are experiencing difficulties as well, many district councils have come to rely heavily on the private sector in the form of Build Operate Train and Transfer (BOTT) schemes to ensure delivery of water (*Indicator South Africa*: Volume 17, No 4). In its evolving state, local government needs additional capacity and institutional support, particularly as government funding for water and sanitation has declined. The focus on private/public partnerships and deployment of non government agencies could be seen either as a realistic response to government's inability to respond alone to these challenges of a better life for all or as a retreat by the state in the performance of its duties. It might provide a solution too to the tension between water connections that are politically driven and those that are demand driven. The equitable distribution of scarce resources is bound to have an impact on the way in which trust is or is not produced. Patterns of inclusion and exclusion (Marais 2001, p. 16) are key factors in determining the way in which the water management process unfolds and how trust relationships between different segments of water users are shaped (Sztompka 1996), a central theme in the discussion pursued in Chapters Four and Five.

[84] To make sure that the reader is not misled, Tapscott also notes that 'by no means all municipalities in South Africa are in crisis' (2003, p. 3).
[85] The authors refer to local government on the African continent but their observations are helpful for understanding the dilemmas facing local government in South Africa.

As is clear from the above overview, water delivery operates within new institutional restraints and opportunities. The formation of new and more legitimate local government, which did not exist in 1994, is a positive change, but institutional reform is difficult and relationships between local, provincial and national government and between DWAF and other departments responsible for planning and delivery, remain strained (MacKay & Ashton 2004, p. 1). Roles and responsibilities between district-level and local municipalities are blurred and budgets and human capacity restricted. Capacity constraints will undoubtedly remain until the necessary lacunae in human and organisational capacity have been reconciled.[86]

The IDPs and ISRDS were designed to deliver a 'basket of services' (Tapscott 2002, pp. 7-8) and were supposed to coordinate and integrate existing government programmes in order to attain stable communities with viable institutions, but most local governments are struggling to meet their development challenges (*ibid*) and perturbingly, 'few people appear to actually participate in the process of local democracy as intended' (Tapscott 2002, p. 10). This has a negative effect on trust as residents simply do not believe that local government will deliver the necessary services (*ibid.*).

Urban versus rural water supply

In view of the multi-dimensional nature of rural development, the successful delivery of services to rural communities depends, to a considerable degree, on the extent to which the various spheres of government are able to coordinate their activities. The demand for equity in access to water is exacerbated by an inequitable distribution of funds to urban and rural areas, for a gap exists between subsidies allocated to urban vs rural service delivery. But the gap in distribution is largely due to the plethora of problems that local municipalities face, particularly in the rural areas. Tapscott (2001) observes that both structural problems and a lack of skills result in immobility in addressing the widespread poverty and welfare problems. Despite the emphasis on rural areas being the 'worst served' and the most in need of water (DWAF 1994, p. 19), government has not been able to resolve the almost total lack of viable local

[86] Public officials are overworked and taking time off from everyday activities is not always practical (Social Development Monitoring and Evaluation of Service Delivery Research Project: August 2004). This data has not yet been officially released but it suggests, together with other research (DWAF Working for Water Exit Strategy research project: September 2003), that training efforts – in both time and money – are all too often misplaced.

government that it identified in the 1994 White Paper. Local government has experienced difficulties in the implementation of rural development and is unable to carry out substantial new responsibilities (ISRDS in Tapscott 2002, p. 8).

The statistics reflect the social dislocation and malfunction of the apartheid years. (2001, p. 197). But the gaps that are apparent in the statistics, where the figure of access to basic services rises considerably in the rural areas – 1 in 10 people collect water from dams, rivers or streams and 20% use a public tap – less than half have running water in their homes. According to Census 2001, of the approximately 11 800 households in South Africa, 32% have running water, 12% have piped water available on a community stand that is over 200 metres from the dwelling and 7% of households have water from stagnant water, river, dams or streams.[87]
In the absence of both capacity and institutional mechanisms for coordinating and implementing effective delivery programmes, particularly in rural areas, service delivery is far from efficient, equitable and sustainable.

Water and trust

Key development concerns of the 1990s, such as empowerment, enabling environment, choice and sustainability (Coetzee *et al.* 2001, World Development Report 2003), have not replaced the dominant technological and economistic discourse in the area of conservation as in many other areas of development. Concerns around social agency as a key to social development and integrated water resource management are all too often sidestepped (Farrington 1999).

Although, as Marais (2001) notes 'citizens are appreciative of the slow but determined efforts' (2001, pp. 192-193) to provide services for the poor, scarcity of water is intimately linked to issues of social justice and uneven distribution of goods. Unaffordable costs and inadequate supply of water aggravate not only relationships between local authorities and water users but also affect family or community

[87] Average household size 4.3. Excluding water vendors, springs, rainwater tanks and boreholes where distance from dwelling is non-specified, according to Census 2001, 10.3 million people have a supply of water that is substandard. This does not take into account households, such as those in Kassiesbaai, the fishing village in Arniston described in Chapter Five of this study, and other villages where there is piped water inside the dwelling but the quality is poor.

relationships. In particular they erode trust between different segments of water users, entrench notions of shame and affect inter-household relationships.

5. Summative remarks

Institutional fragmentation and the lack of coordination between the different bodies remains a problem in water delivery today, and cooperation between institutions, departments and people is fraught. The indelible legacy of apartheid, evident in the present day skew in services such as water, housing, land, health, education and waste removal, remains overriding. The study will reflect on whether and in what way, the historical legacy affects the interaction of water users with one another and relations of power that are manifest between water users. If the legacy continues it would result in chronic distrust between many water users and feelings of shame amongst others, which could take years to uproot.

Politicians view clean water as a desirable campaign, yet the inadequacy of water poses critical threats to the health of people and impacts on environmental integrity in both urban and rural areas. Although DWAF seems to have made significant progress in reversing the water backlog it has focussed primarily on the delivery of water supply, both in approach as well as fiscally.

The transformation in the water sector has been slow with inadequate service delivery biased toward urban households and insignificant institutional reform, declining funding from central government, capacity constraints at the local level, and problematic trade-offs between efficiency considerations and equity requirements. These problems result in a lack of belief or decline of trust in government's commitment to transformation in the water sector.

In the absence of commitment to maintenance and transfer of knowledge, whether or not these campaigns will help build trust in water delivery agents remains to be seen. For, in all aspects, community participation is pivotal to the success of water projects, in particular in driving the user-pays policy (Farrington 1999). As long as water delivery is results-driven and seen first and foremost as a project and not a process, the issue of sustainability cannot be adequately addressed.

> The idea of the state as a (shrinking) fortresslike zone in the field of society lives on. Consequently, the complex interconnectedness of the state and civil society ends up being rendered in terms of externality and exclusion, thereby neglecting the interwoven ways by which power is exercised and reproduced (Marais 2001, p. 283).

The central theoretical question of this chapter is whether and in what ways the changing state responsibility for the delivery of water to consumers affects trust in the water sector. Ingelhart (1999), Fukuyama (1995), Putnam (2000) and Offe (1999) contend that people are more trusting under a democracy. They propose that certain types of state structures are more likely to produce trust. Can government produce trust? Uslaner (2003) argues that it is state policies and not state structures that produce trust (2003, p. 171). Progressive policy is more likely to produce trust and is a necessary but not a sufficient ingredient for the production of trust. In the water sector, water policy and water legislation are more than adequate for the tasks that lie ahead to transform the water sector (MacKay 2003, p. 83), but trust between water users is low.

The purpose of this chapter is to scrutinise the changing role of the state and to reflect on the way in which national government officials interact with local government and other role players and how this interaction affects trust-building processes. Three themes have been identified and organise this discussion: 1) synergy between non-state and state actors (and their intermediaries, the consultants) 2) bureaucrats and change, and 3) style of government. These three themes are discussed within the following main contexts: a) the transformation of an irrigation board into a water user association, b) establishment of a local catchment management plan, and c) implementation procedures at local government level. The chapter begins with a general discussion on the role of the state in producing trust using the three themes as an organising tool. This general discussion is backed up by empirical evidence gathered within a number of selected contexts in the Breede Water Management Area (WMA) no 18. Particular reference is made to the Greater Hermanus Water Conservation Programme, experiences of the transformation from the perspective of local government and from the perspective of water users involved in the

development of the Palmiet Catchment Management Strategy in the Western Overberg region of the Breede WMA. The chapter concludes with a general discussion section followed by summative remarks.

The core argument contained in the selected themes is that despite the changing responsibility of the state for the delivery of water to consumers and a policy emphasis on local service delivery, for a number of reasons the state has maintained strong central powers while relinquishing managerial responsibility for delivery of water and integrated resource management. The chapter puts forward an argument that this is one of the reasons that the social landscape of water reflects low trust between different spheres of government and between government and 'ordinary' water users.

General discussion on the changing role of the state

One of the cornerstones of the Constitution (Act 108 of 1996) [1] is that people be given an opportunity to participate in the decision-making process 'as and when it affects them'. MacKay (2003) notes that efficiency and effectiveness are possible when the lower levels of government carry out functions of delivery (2003, p. 61). In order to achieve these ends, the Constitution envisages a complete transformation of the local government system.[2] The final Constitution made provision for a three-sphere system where each sphere is 'distinctive, interdependent and interrelated' (Cameron 1999, p. 293), but it also reconfirmed that the state is, as popularly considered, the institution that is best able to organise the lives of ordinary citizens (Coetzee *et al.* 2001; Tapscott 2001). The government's adoption of the Growth, Employment and Redistribution Strategy (GEAR) in 1999 has placed the emphasis on the role of provincial and local government in the delivery of services and the alleviation of poverty, but there are tensions between the RDP redistribution emphasis

[1] The final constitution came into effect in February 1997 and became fully effective after the 2000 local government elections (Cameron 2003, p. 120).

[2] Section B of the White Paper explores the notion of 'developmental local government. Foreword by Mohamed Valli Moosa, Minister of Provincial Affairs and Constitutional Development. http://www.local.gov.za/DCD/policydocs/whitepaper/wpf.html. *The local government transition began with the negotiated Local Government Transition Act (LGTA) that 'sought to deracialise local government and usher in legislative interim arrangements* ..... Mazaza in Lyons, Smuts, *et al.* 2000.

and the macroeconomic stabilisation emphasis of GEAR, tensions that have, as Oluwu & Wunsch (2004) note, a disruptive impact on local governance (2004, p. 84).

The current shift towards localised ownership of delivery and decision-making processes around delivery activities is consistent with national post-apartheid policy. At the core of the local development agenda, laid out in the framework of the Local Economic Development (LED),[3] is the mandate of local government to empower a wide spectrum of water users in the management of water. To further these ends, the devolution of powers to local authorities is critical (DWAF 1994, 1997, 2001; Coetzee *et al.* 2001; Tapscott 2001; Friedman 2002). This devolution of decision-making to the local level is not a process unique to South Africa (Lowndes 2003; Cameron 2003; Tapscott 2001). Newman *et al.* (2004) propose that this is part of a shift in the role of the modern state which changes from governing through direct controls to governance where state actors interact with a wide range of actors (2004, p. 204).

It is agreed that water resources should be managed at the level of the catchment area or groundwater aquifer (Faysee 2003, p.1), and the progressive establishment by the Minister of Water Affairs of catchment management agencies (Government Gazette 1998, p. 84) is also in line with international trends in water policy. The proposal for the establishment of the Catchment Management Agency is developed in terms of Schedules 77, 78 and 79 of the National Water Act (Act 36 of 1998) for submission to the Minster of Water Affairs, and places the state as custodian of water resources. Absolute powers have been given to the national government to determine the reserve, approve catchment management plans, water tariffs, inter-basin transfers and governance issues (Conradie *et al.* 2001; Eberhard 1999; MacKay 2003). Other issues can be taken to the Water Tribunal, an independent body established in 1998, or to the High Court if required (MacKay 2003, pp. 63-64).

Offe (1999) considers the dynamics of trust as 'a steady state capable of reproducing itself,' a super-scarce and much-needed resource. The discussion below explores

[3] Also White Paper on Transforming Public Service Delivery (1997), Municipal Structures Act (1998), Development Facilitation Act (1995).

where and in what ways opportunities for trust are lost and examines the claim that trust itself is a super-scarce but much-needed resource.

Synergy between state and non-state actors

The emphasis on the role of civil society in development (Putnam 1995, 2000; Freire 1972; Eade 1997; Warren 1999) should not be seen as a replacement for the role of the state. Some analysts (Foley & Edwards 1996; Fox 1996; Kickert *et al.* 1999; Ostrom 1996; Tarrow 1993; Levi 1996; Evans 1996; Evans *et al.* 1985; Rueschemeyer *et al.* 1992; Ritzen & Easterly 2000) have carefully examined the way in which state and civil society together contribute to democracy and development. Foley and Edwards (1996) in their article 'The paradox of civil society' do not question the ability of civil society to produce trust. However, they do refute that civil associations have the capacity to socialise participants into 'norms of generalised reciprocity and trust' (1996, p. 41). These authors propose that this view is based on certain assumptions, for instance, that the trust produced by civil society is a public good, available to society at large (*ibid.*) and that this trust is independent of the prior achievements of both democracy and the presence of a strong state (1996, p. 48).[4] These contentions are of particular relevance when considering change and assumptions of pre-packed trust as they manifest themselves in the water sector whose historical legacy is undemocratic and where water was managed with disjuncture and fragmentation.

Peter Evans (1996) recognises the 'state-society synergy' as a catalyst for development. Evans (1996) sees the combination of strong public institutions and organized communities as a powerful tool of development (1996, p. 1130), with the emphasis on synergy as the most reliable contributor to development. On their own, horizontal networks between local organisations 'lack the clout to offset concentrated elite power' and 'reformist government officials' who might be insulated from their constituents (1996, pp. 1130-1131).[5] Fox (1996) considers this as a process of co-

[4] In essence, Foley & Edwards (1996) argue that if civic life is able to oppose tyrannical rule then it could also oppose democracies.

[5] Fox's (1996) empirical work is on the rise of autonomous peasant organisations in authoritarian rural Mexico. He discusses the ability of local groups – when in this extreme case there is zero cooperation between state and civil society – to benefit when 'reformist government officials' are able to provide the external linkages necessary to consolidate large-scale representative organisations under

production (Fox 1996, p. 1089) of social capital. Tarrow (1993), in discussing Tilly's *The Contentious French* stresses the interconnectedness between popular movements, culture and history, proposing that although rooted in popular culture civil action depends on '...the development of state building and capitalism' (1993, p. 71). For Tilly, the relationship between history (of the state) and popular movements should not be separated.

Evans *et al.* (1985) also emphasise the 'meeting point of states and societies' (1985, p. 27). For these authors, interest groups and classes depend on the structures and activities of the 'very states the social actors, in turn, seek to influence' (*ibid.*). Synergistic relationships between the state and local actors are championed by Ostrom (1996, 2000) and Levi (1996, 1996a). Ostrom (2000) argues that government agents can strongly affect the level and type of social capital that is available to sustainable development efforts (2000: 173). Levi (1996) stresses the importance of the state in 'making trust possible' (1996, p. 51) and that governments influence civic behaviour and elicit trust, or distrust, towards themselves (*ibid.*) because 'policy performance can be a source of trust, not just a result' (1996, p. 50).

There is enough evidence from the above to make a strong case for synergy between state and local actors. Kickert *et al.* (1999) are specific about the importance of collaboration 'because they cannot attain their goals by themselves, but need the resources of other actors to do so' (1999, p. 6), and they achieve their goals because there is participation from the bottom up and from the top down. Common assumptions from the above theorists are that synergy assumes an interaction between actors but it is the style of government that is critical in determining the outcomes of this interaction. If, according to Sztompka (1997), this style is non-interventionist and nurturing, there will be trust and if not, the opposite, distrust, will be produced.

authoritarian conditions. Although the context differs from our own, the notion of co-production between local groups and government officials is pertinent.

Intermediaries between state and non-state

Kickert & Koppenjan (1999) acknowledge that government is not the single dominant actor that can impose its will for there are a range of individual actors and interest groups that are able to do so. One group of actors, briefly considered in the context of the Breede Water Management Area (WMA), are the intermediaries between the state and non-state actors, the consultants, who operate in the complex domain of systems, institutions and people involved in the building of the catchment management agency. This group of actors have the interesting role to play in-between state and citizen, as 'middlemen' or 'network managers' (Kickert & Koppenjan 1999, p. 58). It is the role of consultants to distinguish between diverse target groups (*ibid.*) and, tasked with communicating information from one set of actors to the other, these intermediaries contribute, at least according to Kickert *et al.* (1999), to the establishment of patterns of social relations between interdependent actors that are stable (1999, p. 7). Theoretically, according to Selener (1997), intermediaries act to equalise the basis of power and control by drawing stakeholders into the forums and by guiding and informing state officials of the needs and preferences or problems that have been identified by the non-state actors – and vice versa. But it appears that instead of being 'middlemen' or 'network managers' between DWAF and local water users, and imposing their own will as independent actors (Kickert & Koppenjan 1999), the consultants that act as intermediaries in the Breede-Overberg CMA process are spokesmen for the state.

It appears that the network leaders are what Hardin (1999) calls 'men of honour' and 'trustworthy' others (1999, pp. 36-38) who play the advisory intermediary role and whose actions are not questioned because they are assumed to be 'grounded' in the interest of the person who is trusting (1999, p. 26). The consultants in the context of the Breede WMA occupy 'legitimate' and accepted positions of power as they delegate, organise and retain full support from state officials as well as local stakeholders (Kickert & Koppenjan 1999, p. 58). Notions of 'encapsulated interest' (Hardin 1999, p. 24) and trustworthiness that Hardin (1999) identified are pertinent to

this discussion, and trust, between the elite in-group and between DWAF and these trustworthy 'others,' does appear to be high.[6]

More to lose and less to trust

In the early phases of the transformation process, trust appeared to be high between commercial white farmers and consultants, but as new issues are brought into the agenda there are new risks, and new trust relationships are currently being negotiated. Trust in the consultant-influenced water policy network is, for instance, threatened as the issue of compulsory licensing, water tariffs and levies has been raised, with prices set to rise over the next decade (Girdwood 1999, p. 25).

> We are supposed to register all the hectares, what was grown, irrigated, capacity of dams and so forth. Where is the money that we are going to have to pay for water going to? It is not clear at all why a farmer should pay for water that runs freely in the river. He has built the canals, the dams, why must he pay for rainwater? It's not like domestic users who have purified water that is brought to them through infrastructure where a town engineer needs a salary. I am a farmer and we are annoyed. Many farmers are not registering. Those that have small farms in the mountains, they hardly use water and why should they register? Wheat doesn't need to get irrigated nor does sheep farming need irrigation. (Interview: Farmer one, Breede WMA, Robertson, Final Public Meeting on the Breede River Basin Study, November 2002)

At the present time, policy reform pertaining to these issues has not yet been accepted and there is a lack of trust that the long-term gains of pricing and licensing are greater than the short-term losses (Ritzen *et al.* 2000, p. 3).

> We will pay even though we might not use that water one year. If you don't use a particular orchard for a few years, then you still have to pay because that is water that has been allocated to you. It doesn't make sense to a farmer. (Interview: Farmer Two, Overberg WMA, September 2001)

Farmers are also concerned about raised tariffs to cover government's Working for Water programme as one commercial farmer in the Breede WMA complained:

[6] Certainly this appeared to be the case in the earlier interviews. However, in the interstitial places 'on the stoep' there was also suspicion and distrust by some segments of water-users, particularly as interests diverged over issues such as pricing.

> Why must we pay for the clearing of alien invasive vegetation if we don't even have aliens on the farm? Why should the catchment tariff costs include this because we are paying for others? (Interview: Farmer Three, Breede WMA, Robertson, Final Public Meeting on the Breede River Basin Study, November 2002

Other concerns expressed at the Breede Overberg Reference Group in October 2001 range from:

> Must we who use groundwater pay the same price as someone who irrigates taking water from the Breede River? Must the Overberg pay the same as the Breede? (Farmer Two, Overberg WMA, October 2001)

Or again:

> If water is not purified, not good quality or it smells, does it cost the same? Is there any provision for difference in use and payment structures for water? (Farmer Five, Overberg WMA, January 2003)

At the same meeting there was suspicion that local users are going to be asked to carry DWAF costs and raise funds to pay staff for functions that DWAF performed in the past.

> Who will pay for the financial and auditing aspect of the CMA? DWAF is doing these functions but they say they will charge for these services. Are we paying things that government should be paying for? Are we also going to pay for DWAF salaries? (ex DWAF official, Overberg WMA, interview September 2002)

As MacKay (2003) confirms, CMAs are expected to be financially self-sufficient, covering the costs of their operation from water use charges (2003, p. 63). Commercial farmers are concerned that they will be carrying charges for catchment schemes although they were self-reliant and carried costs themselves for their infrastructure

> *Water is te duur vir privaat boere met eie netwerke en damme.*[7]
> (Farmer Five, Overberg WMA, September 2001)

Or again:

[7] Translates as: water is too expensive for private farmers with their own networks and dams.

> Commercial farmers pay for their own pumps. Why must they also pay a fee for the catchment agency to subsidise the emerging farmer? (Water User, Central Breede Water User Association, Robertson, September 2001)

The go-it-alone strategy of commercial farmers is now being challenged, and trust between farmers and government officials is being tested.

> The importance of being part of a whole area doesn't hit home. They have always looked just up to their own borders and they don't consider the catchment as a watershed area. Others are beginning to realize that they now must look further than their own fences and this forces them to ask questions and to start being aware of the way they fit into a larger puzzle. It is important so that proper planning in the catchment can take place but farmers are resisting that. They are also a bit daunted by the paper-work. It is not simple to register. DWAF officials are prepared to come to the area at particular times to help with the paperwork. The process of registering is very new and is alarming for some. (Chairperson Central Breede Water User Association, Interview Robertson, Breede WMA, September 2001)

A number of other concerns were raised around what could be considered an acceptable degree of cross-subsidization. Some consumers prefer fixed tariffs while others question whether equitable cost structures are fair. The above data reflects the high degree of uncertainty and that many stakeholders are unlikely to take a risk and trust government officials or their intermediaries until their concerns are addressed.

Lack of clarity about administrative duties for collecting finances exacerbates conditions of uncertainty. Is the CMA responsible for the auditing aspect of finances or should this be seen as a separate function that is outsourced? DWAF itself is experiencing uncertainty within its own department that does not make transformation any easier. Currently DWAF has assumed the role of 'proto-CMA' where CMAs are not yet up and running. However, functions that are currently performed by DWAF are expected to be carried out in the future by the CMA. If DWAF were to continue to perform duties, it would 'charge for any services offered.'[8]

[8] DWAF's acceptance that it is unrealistic to have CMAs in all the WMAs as was expected has resulted in a restructuring and reshuffling of the organisation. A model is now being set up within the Department where DWAF takes the role of proto-CMA. Minister Sonjica announced in her budget speech on June 2004 that four CMAs will be established during this financial year. These are:

DWAF itself has expressed concerns about lack of funding and considers the CMA process to be financed as a 'once off.' According to DWAF, should further funds be needed, the CMA has three options to procure funds:

- Water use charges made in its WMA in terms of the pricing strategy
- Money from any other lawful sources such as grants, loans and so on
- Money appropriated by Parliament

(DWAF Water Management Institutions Overview: 2004)

Evidently, from the above data, the contentious issue of water user charges and water management charges has not yet been resolved. Lack of trust in the policies has negative repercussions on trust between water users and state actors as well as between themselves and the intermediary 'spokesmen for the state' who are seen as the bearers of bad tidings. Hardin's (1999) theoretical assumption that encapsulated interests drive trust is useful in understanding the permutations of trust, uneasy trust and mistrust. In instances where state (or spokesmen for the state) actors are seen to no longer have converging interests, they are perceived to be less trustworthy.

Odd-Helge Fjeldstad (2003), in his paper examining compliance behaviour in respect of service charges, asks whether trust can affect economic behaviour. White agriculturists have seen themselves in the past as entitled to free water, and water and land rights were inseparable. The culture of entitlement continues to plague the sector.

> The farmers fear the process. They think that if they register they will definitely have to pay for something that they have always had privileged access to, that is water to irrigate their lands. These farmers' farms that have their own boreholes and irrigation systems don't actually have to be regulated to function, only to plan for the whole region which is the point of the new integrated catchment management strategy. They can't see what is in it for themselves. For instance, if something is polluted up the river then it affects something else, and someone else down the river. (Chairperson Central Breede Water User Association, Interview Robertson, Breede WMA, September 2001)

Inkomati, Umvoti/Mzimkhulu, Breede and Crocodile West/Marico water management areas. Twenty eight million rand has been budgeted for this in 2004/2005. The Minister notes 'the Department will devolve administration to the local water users and communities, accompanied by vigorous capacity-building so that historically excluded communities can participate in water management.' Source: http://www.dwaf.gov.za/Communications/MinisterSpeeches/2004/BudgetVote17Jun04.doc

The intended consequences of the law are to ensure that no one can own water privately and that water is a national asset and the 'user-pays' principle is paramount. The unintended consequences are that social capital between the richer white farmers is being activated and strengthened. The extract above indicates that some commercial farmers are beginning to see the advantage of cooperation and of not acting as anomic individuals.

> What they don't realise though is that they don't have a choice anymore. They must register. It is the law. Also it is important so that proper planning in the catchment can take place. If they don't register, then there will be no provision made for water for them and they might find themselves depleted of a resource that was always working for them. (Chairperson Central Breede Water User Association, Breede WMA, September 2001)

It is here that the contradictions apparent in the debates on risk and trust that were presented in Chapter Two are relevant. On the one hand, Seligman (1997), Warren (1999), Levi (1996), Luhmann (1979), Offe (1999) and Giddens (1991) contend that risk and trust go together and that, as rational actors, people take the risk to trust one another. Trust involves risk, says Offe (1999), because there might be some undesirable event caused by the trusted (1999, p. 47). On the other hand, Hardin (1993, 1999) and Patterson (1999) present different arguments. Hardin (1993, 1999), for instance, considers that it is common interests that drive trust relations. Patterson (1999) investigates sites of uncertainty and notes that when people are insecure, anxious and uncertain, distrust is more likely to manifest itself than trust.

How are these ideas able to throw light on what is happening in the CMA process where a situation such as Inglehart (1999) or Stolle (2003) describe as one where everyone trusts everyone else is far from the reality? If there is low trust, does it mean then, as according to Ingelhart (1999) or Stolle (2003), that the process is undemocratic? Luhmann (1995) posits that risk and trust are visible when people are adequately assured against losses, but the cost of taking a risk that an 'undesirable event caused by the trusted' (Offe 1999, p. 47) might occur, is too high for many commercial farmers. As a result this segment of water consumers is unlikely to open up their familiar networks where these do exist, and they prefer what Schaap & van Twist (1999) see as closedness or network fixation. Within the context of this

discussion it is worth considering that non-participation of the previously disenfranchised might be because of trust rather than distrust (or shame). Because there is less to lose, the risk of trusting in the system - and the people who operate within it - is more tenable.

The role of the state is pivotal and because there is so much uncertainty, style of government is more critical than ever before in brokering trust and in catalysing changing patterns of inclusion and exclusion.

Style of government

Kickert *et al.* (1999) argue that government gives way to governance when governments 'proclaim a strategic retreat from the public domain by promoting privatisation, deregulation and decentralisation'(1997, p. 2). Piotr Sztompka (1997) identifies style of policy as one condition[9] that is presumed to engender generalised, diffuse trust, basing this on the argument that 'trust breeds trust; trust received is usually reciprocated' (Sztompka 1997, p. 12). If government treats people like subjects, not objects, it will engender generalised trust, but if people feel that they are not being listened to and are treated as objects, there will be distrust or, in extreme cases, as reflected on below, shame.

Sztompka (1997) assumes too that prolonged absences of trust will lead to an embedded tradition of distrust (1997, p. 13). This view is confirmed by Marais (2001), Ruiters (1996) and Ridaeus (1998) with their reminder that the interventionist approach adopted during the regime was not conducive to trust-building. The consequences of failure 'to proclaim a strategic retreat' today and of maintaining a strong government presence, impact on the potential of new water policy networks to take shape and are reminiscent of the way government did things in the past.

Trust can bridle expressions of hostility and civilize disputes (Parry in Sztompka 1997, p. 10) because as people get to know each other and learn about different needs or opinions to their own, they begin to develop trust amongst one another. In its

[9] The other six are: 1) normative certainty, 2) transparency of social organisation, 3) stability of the social order, 4) accountability of power, 5) enactment of rights and obligations and 6) enforcement of duties and responsibilities.

absence differences, inquiries, debates that have a positive effect on democracy dwindle. Sztompka (1997), like Levi (1996) sees the state as the main agent for nurturing trust. Sztompka's (1997) focus on intervention from the top down places government as a key determinant in the process as opposed to Rose (1994), who suggests that trust is built from the bottom up. It is synergy between the state and society that is critical and neither state nor civil society can produce trust alone.

It is pertinent to note that both top-down and bottom-up interaction, whether nurturing or interventionist, depends on a flow of knowledge between the various parties. The distinction between interventionist and nurturing impulses is the extent to which actors are able to equalise the basis of power and control (Selener 1997) and to acquire knowledge on both sides. Inequality and differences between people can hinder the flow of information and they can be disastrous for sustainable development (Ostrom 1996; Farrington 1999). The problem with interventionist styles, or what Gillian Hart (2002) calls 'interventionist impulses' (2002, p. 260), is that they do not tolerate process and neither do they accommodate exchanges where trust can be, as Fox (1996) notes, co-produced (1996, p. 1089). Interventionist impulses not only do not produce trust, but they inhibit innovation and change, making progressive reform programmes in the water sector difficult. Could the change from the old to the new be easier if the interventionist impulses of government were curtailed?

The second of the six thematic schema is bureaucrats and change and the following subsection presents some ideas on this theme and reflects on ways in which the empirical data matches these ideals.

Bureaucrats and change aversion

Meyer & Cloete (2000) call to mind that people do not like change and 'will be sceptical about anything that threatens their status quo' (2000, p. 246). Meyer & Cloete (2000) also remind us that resistance to change is not only a phenomenon found amongst conservative people but that it affects all sections of society (*ibid.*). Andrews & Shah (2001) examine a particular set of people, bureaucrats, and note that, 'strictly hierarchical, centralised organisations, like public bureaucracies in the developing world, are slow to change' (2001, p. 4) and that the very effectiveness and

efficiency of these structures depends on their ability to remain stable. Although, as Rainey (1991) notes, public organisations are constantly changing and should not be considered only as bastions that are resistant to change (1991, p. 223), the changes required in the water sector at the present time are radical. Public officials in all tiers of government, but in particular within the context of this discussion, officials in the third tier of government, are plagued with uncertainties. Roles and responsibilities of government officials are not as the final Constitution envisaged 'distinctive, interdependent and interrelated' (Cameron 1999, p. 292), but blurred. Rainey (1991) suggests that successful organisation change requires: 1) sustained support from higher levels, 2) participative planning and 3) flexible implementation (1991, p. 233), little of which is happening in the water sector today.

Evans (in Levi 1996) considers that the key to successful reform is the need to embed the bureaucracy in civil society (1996, p. 244).

> In the eighties, Department of Water Affairs officials had the mentality that they are public servants. You can't make rash decisions that affect people's lives. Local government, the old civil servants in the council, are practical. They are there to fix leaks, lay pipes and work closely with people. You have a very different idea of people. As a public servant, you learn to be very practical (ex-DWAF official: interview, Overberg WMA, September 2002).

The extract above is important for it describes the way in which many public officials do embed themselves in civil society and respond in practical ways to problems on the ground. But for some bureaucrats, jobs are related to their profession as technocrats and appointment criteria are not always well matched with the tasks that are required (Ostrom 1996, p. 211). Many bureaucrats lack the skills to liaise with communities. Others, as Gran (2001) notes, do not necessarily have the 'professed objectivity and political neutrality' that they are claimed to have, and that they 'often served the strongest clients best, even when the government wanted otherwise' (2001, p. 11).[10]

Many public officials welcome policy reform and are willing to adjust and adapt to the changes required, there is frustration at not being acknowledged by higher levels

[10] Gran (2001) refers to his own work in 1994 where he cites Barton (1998), Jacobsen (1964) and Jansen (1971).

of government, for local level public agents are required to perform tasks that are impractical and unrealistic.[11] Another obvious constraint on trust between local and central government officials is, as Levi (1996a) notes, the lack of incentives that promote professionalism, including payment and support from higher levels of government. Change is likely to be more readily embraced if it comes with incentives in the form of status or salary increases but for many public officials the opposite is true. Some professionals see that their workloads and responsibilities have increased but that support from higher levels that Rainey (1991) identifies, as so important, is lacking. Public servants who do have the ability to liaise with communities, without incentives, to make the credible commitment 'to serving the public good' are insufficient (Levi 1996a, p. 244).

Despite the goodwill of many public servants to embrace change, there is also, as Mutahaba *et al.* (1993) note, resistance to change by senior public service personnel who do not recognise and accept the need for changes or policy reform (1993, p. 99). Empirical data reflects on ways in which executive personnel in administrative institutions have difficulty in adapting to new development-oriented roles (Oluwu & Wunsch 2004, p. 91). Oluwu & Wunsch (2004) note that although professional city personnel might be aware of the need to change direction, 'even anxious at times', change does not necessarily follow, and that existing habits, policies, standard operating procedures or existing clientele might explain this (2004, p. 103).[12] In summary, those who do embrace change within their organisations often experience resistance and as Ostrom (1996) confirms, their initiative and creativity is discouraged (1996, p. 212).

Policies have changed, but behaviour and attitudes of government officials are more difficult to change (*ibid.*). Within bureaucracies, overall, there is a reluctance to wholeheartedly embrace the challenges that go with deep change and transformation and to engage in a process where information about water is shared in a meaningful way. In stakeholder committees exchanges and ideas are limited:

[11] Recent work (July 2003-March 2004) evaluating projects on behalf of the Impumelelo Innovations Award Trust provided empirical evidence of this.
[12] Oluwu & Wunsch (2004) describe empirical work undertaken in the Nelspruit municipality in Mpumalanga province during 1995 and 1996.

> Pleasing politicians and doing things in the same way rather than trying new ways of doing things... seems the preferred way to go (ex-DWAF official: interview, Overberg WMA, September 2002).

The above extract resonates almost word for word with experiences in the water sector in other developing contexts, described by Elinor Ostrom (1996): 'faced with an incentive structure in which pleasing politicians rather than working hard pays off, irrigation officials are strongly tempted to assist politicians in their rent-seeking activities' (1996, p. 212). State officials who drive the CMA process at the provincial and local level are eager to please each other and officials at the national level. Their intermediary spokespersons are also eager to please DWAF, their client, and there is little time in meetings for dissent, debate or innovation.[13] But the aversion that bureaucrats have for innovation has serious consequences for the way in which the project of reform in the water sector unfolds, for it inhibits human agency. Not only is innovation blocked but trust is undermined. As the empirical data reflects, local users feel that they are invited to be contributors in the building of the CMA but that their contributions are not taken seriously. It is likely that it is not only commercial farmers but also government officials themselves, particularly at the national level, who consider that the costs of change are greater than the benefits (Meyer & Cloete 2000, p. 246-248). Certainly, the way in which the CMA process is now being reconsidered, at least for the majority of WMA, suggests that this might be true.

The resistance to handing over decision-making to local water users who stand outside DWAF is unsurprising as within the historical context all decisions were controlled by the state. In the water sector there are a range of actors that have different and sometimes conflicting objectives. Farmers, for instance, are against compulsory licensing as they feel that water that is consumed from farm dams, or rivers running through the farms, should be free. Agriculturists in the Palmiet are against the transfers of water to the Metro. But actors need to change their 'go-it-alone' strategies (Ostrom cited in Kickert & Koppenjan, p. 40) in order to achieve synergy and to attain goals together (Kickert *et al.* 1999, p. 6). The concerns of local

[13] Direct observation gathered in various meetings during in the WMA from February 2001- November 2003.

water users are all too often not discussed[14] and the state-society synergy proposed by Evans (1996) is not producing the expected trust. The terrain in which the water policy is being implemented is complex and uncertain and is rife with problems. Trust at the lowest sphere of government is particularly low.

Local government

The ordinary water specialists working for municipalities in the Breede-Overberg are key actors involved in the building of the Breede-Overberg CMA and are supposedly, within the realm of ideas, key agents of change, but in fact they have very little agency. Assigned a wide range of responsibilities in chapter seven of the South African constitution, 152 (1), the objects of local government include: to provide democratic and accountable government for local communities, to ensure the provision of services to communities in a sustainable manner, to promote social and economic development, to promote a safe and healthy environment and to encourage the involvement of communities and community organisations in matters of local government (Cameron 2003; MacKay 2003; DWAF 1997).

Section B of the 1998 White Paper on local government explores the notion of developmental local government, and the mandate of local government, in addition to the tasks noted above, is to contribute to local job creation and community empowerment (DWAF 1998). Government's commitment to accountability downwards has been to bring local representatives into the arena of municipal governance. The intention is to voice the needs of the poor closer to areas of public service and implementation, but local municipalities struggle with the entry of politicians into public service and the effect on service delivery is not always positive (Cameron 2003, Tapscott 2001).[15]

Capacities of local government

Mutahaba *et al's.* (1993) insights into public administration in Africa, pinpoint the problem of capacity, suggesting that the burden placed on local administration is far in excess of its capacity (1993, p. 5). According to these authors, the 'ecology of public administration in Africa is in disarray' (1993, p.

[14] This discussion will be taken up thoroughly in Chapter Five as it forms part of issues of inclusion/exclusion and knowledge exchanges.

[15] The local government system consists of 843 municipalities and over 11 000 democratically elected councillors: White Paper on Local Government: 1998. Section A (2.7).

8). There appears to be a paradox with, on the one hand, the onus on local institutions to deliver, while on the other, an ethos, reminiscent of the previous regime to 'command and control' (Cohen & Rogers 1992, p. 437) from above. The following extract from an interview with a public official involved with water services is relevant:

> We get sent these piles of documents to read. Every day there is a new bill to read. How can we be expected to read everything and make a contribution? Then we are in meetings all day. At the same time, the distances are huge here and there are not enough people to do the work. I myself must drive to Bot River, which is 150 kilometres from here, when I hear that a borehole has been vandalized. (Interview, Town Engineer, Overberg WMA, Agulhas Municipality, October 2001)

The data suggests that the ability of local government to serve the needs of citizens is more and more restricted, and that, as Mutahaba *et al.* (1993) note, public administration at the local level is taking on a 'load far in excess of their capacities' (1993, p. 5).[16] Financial and human capital is scarce and decentralization, at the core of the National Water Act (Act 36 of 1998) and the Water Services Act (Act 108 of 1997), is meaningless unless local governments have sufficient resources to perform their functions (Cameron 2003, p. 114). Sustained support from higher levels means providing budgets and staff, but the government's official position is to cut government expenditure in order to reduce budget deficit and that local government, according to GEAR policy, should be largely self-sufficient (Cameron 2003, pp. 122-123).[17] In order to fulfill its constitutional mandate, local government requires considerable additional resources (*ibid.*).

> At the same time we have been told that there is new water quality control legislation. This means that there are obligations to put chemicals in the

[16] Mutahaba *et al.* are referring to African public administration, but their observations match well with the South African case, despite the differences in economic status between South Africa and its neighbours. 'Taking on' should be balanced against 'landed with' as many local authorities are unable to resist the load that is put on them.

[17] Budgets do not match although there are financial arrangements through, for instance, the municipal infrastructure programme of the Department of Constitutional Development that finances infrastructure in areas where local government needs financial support to provide it. Municipal Infrastructure Investment Grants (MIIG) fund residential properties. The Consolidated Municipal Infrastructure Plan (CMIP) of the Department of Constitutional Development provides the backup for those service authorities and service providers that are unable to alone finance the delivery of water to the households under their jurisdiction (DWAF 2001a). The phased introduction of these reforms will be managed through the annual Division of Revenue Act.

> water purification works. We have to measure and monitor the level of the chemicals, probably on a daily basis. Who is going to do that work? Our budgets are being cut back and we have less staff. This has not been thought through and it is causing a lot of uneasiness amongst the people who work here (Interview, town engineer, Agulhas Municipality, Overberg WMA, November 2001).

Theoretically local government, under the new Constitution, is no longer subordinate to national and provincial government and is a sphere of government in its own right (Cameron 2003, p. 120). The empirical data confirms what Oluwu & Wunsch (2004) have noted – that national policies and directives are all too often imposed on provinces and localities without sufficient regard for their specific situations (2004, p. 84). Lowndes (2003) identifies a critical gap in policy and proposes that this gap provides an explanation for the dissonance between practice and policy. Lowndes (2003) contends that it is not because the central authority reduces its power that this will mean more autonomy at the local level and that, in fact, it signals more, not less, central control because the reduction in control is managerial and not political (2003, p. 144). Lowndes (2003) proposes that this is indicative of strong centralized tendencies that contradict apparent rhetorical notions of local development (2003, pp. 135-143). Although her conclusions refer to the White Paper for Local Government 2001 in the UK and are therefore drawn within the context of a 'developed' country, these insights are eminently pertinent within the context of the Breede-Overberg WMA. Lowndes (2003) observes too that policy is 'very thin in terms of substance' and that simply soliciting more input from citizens, as is the trend in current water policy, will not deepen democracy, neither will it increase local institutional autonomy (2003, p. 144). In the water sector, decisions continue to be taken by higher-level tiers of government and local government is left to manage as best as it can.

Friction and mistrust have grown within municipalities in the WMA, making the everyday job of delivering services such as water difficult. These problems are unlikely to be resolved by the establishment of CMAs or WUAs, and the emphasis of catchment management on the resource, rather than services and delivery, only aggravates the problem. Constructing institutional systems, such as those that inform the CMA, catchment management forums, catchment committees, reference groups or the two statutory bodies, the WUA and the CMA, that are outside of local

government, is a necessary but not sufficient condition to redress the imbalances of the past.

The statutory bodies and the supporting committees that inform them are intended to perform functions that were performed by DWAF in the past,[18] but they cannot be a solution to the limited administrative capacity, the inadequate supply of human and financial capital or fragmentation within local authorities. The case of Hermanus, described below, provides empirical evidence to support this discussion and confirms the findings of Lowndes (2003), Cameron (2003), Tapscott (2001) and Mutahaba *et al.* (1993).

Restricted opportunities to implement water policy in the Overberg

The Greater Hermanus Water Conservation Project (GHWCP) in the Overberg, was a collaborated effort between the (former) Greater Hermanus Municipality and DWAF. In 1997 the GHWCP introduced a series of steps that would make it a model for improved water management. The project is a package of incentives and disincentives aimed at promoting equity, efficiency and sustainability in the supply and use of water in Hermanus. The twelve-point 'carrot and stick' plan was intended to make Hermanus a model town for water conservation, providing a blueprint for other similar projects in South Africa. One of the most successful aspects of the programme was the design of an informative billing system. Water users under the jurisdiction of the municipality were shown their month-by-month consumption for a period of 13 months, allowing them to manage their own consumption. Additional information on the billings reflected the users' consumption relative to other consumers in their neighbourhood. In 1999 the GHWCP was 'becoming one of the most-quoted water-conservation initiatives in the world'[19] and was on its way to being the standard model for water management in South Africa.

[18] WUAs for instance may operate and control abstraction and/or distribution, manage certain dams, rivers/streams, groundwater use and effluent control within a quaternary, tertiary and/or secondary catchment that could have a detrimental impact on their source. Under the 1956 Water Act, these functions were previously fulfilled by irrigation boards that were primarily bodies that represented the needs and preferences of an economically active elite agricultural constituency. The WUAs are established to do local management of water use under the authority of the CMAs.

[19] Source: Interview Dr Guy Preston (February 2004).

Paradoxically, despite savings, due largely to the awareness campaign and wise water management, including the fixing of broken taps, reporting leakages, etc., the conservation programme today receives almost no support within the municipality. One of the most important components of the 12-point plan, the informative billings, has been phased out. The successful implementation of the programme depended on sustained support from higher levels (Rainey 1991), in particular from DWAF but also from within the municipality, but this is not happening today. DWAF withdrew its support from the programme in 2000 and, as the programme lacked internal backup, this despite international acclaim for its vision and achievements in water conservation, for the conservation initiative, it was severely curtailed.

Oluwu & Wunsch (2004) identify seven key political elements that contribute to effective local governments, three[20] of which are relevant to this discussion; they must be able to 1) identify problems, 2) set priorities and 3) mobilize resources. Water services within the local municipality did not have the authority to make decisions nor to extract the necessary funds from the treasury department within the local municipality. Trust between government officials within the municipality is low. Although demand-driven management has been identified by DWAF (1994, 1997, 1998) as the single most important component of delivery, the relaxing of controls (Lowndes 2003, p. 135) by central government, illustrated here by the absence of support from DWAF, has increased the gap between policy and practical implementation. DWAF's lack of support for the project is in contradiction to its demand-driven policy rhetoric, and the result is that local water demand management strategies are being compromised. DWAF, ostensibly providing powers to local authorities through the legislative frameworks of water policy, has not created an environment in the water sector that is conducive to implementing its policies and empowering its local partners (Lowndes 2003, p 138).

There is resistance to change, within the municipality, where bureaucrats' preferences are for the routine duties of billing and costing for water services. Public officials are unsupportive of innovation and creative solutions for policy implementation. The local municipality is a site where Balogun (1989), in his critical assessment of the

[20]The other four are: 4) implement programmes, 5) evaluate results, 6) learn from those results and 7) maintain popular legitimacy.

need for managerial adaptability for Africa's development, notes the 'official's preference for bureaucratic methods' produces obstacles to visionary policy (1989, p. 229). Given the unfortunate match between the ideals and the reality, the opportunity for trust production between a wide set of actors is all too often undermined in the water sector.

In certain instances it is likely that the lack of financial and human resources makes managerial tasks difficult (*ibid.*) for, as Agrawal & Gibson (1999) note, in order to implement processes that are the outcome of decision-making at the local level, adequate funds must be forthcoming (1999, p. 641). Water services are not ring-fenced and income from water cross-subsidises other municipal services. The GHWCP had reduced costs to the Greater Hermanus Municipality but despite this the savings were not made available. MacKay (2003) highlights the need to allow for transparent ring-fencing of the revenues that are collected via water use charges so that the revenue collected from water can be fed directly into improving and supporting water resources (2003, p. 80). Hermanus is a case where organizational culture obstructs rather than promotes successful policy implementation (Cloete & Meyer 2000, p. 250), but, importantly, it illustrates the inability of a local municipality to perform its duties and to meaningfully participate in policy implementation. The gap between the Water Services Act (Act 108 of 1997) and the National Water Act (Act 36 of 1998) compounds the problem as the opportunities to gain a voice in the statutory bodies that are being constructed in the WMA are primarily for water resource management and do not match the concerns of water services, despite the obvious interconnections between the two.

Water User Associations

During the years of apartheid, the most organised water management systems were the irrigation boards that together with water boards ensured water for white commercial farmers was delivered (Eberhard 1999; Eberhard & Pegram 2000; Faysee 2003). The two statutory bodies that are now proposed are the Catchment Management Agency (CMA) and the Water User Association (WUA). WUAs are the new statutory bodies established by the Minister under the National Water Act

(DWAF 2004).[21] WUAs are institutions mandated to control localized water resources and to plan, advise and inform the CMA. In order to clarify the difference between the WUA and the CMA, the purpose of the CMA is to 'delegate water resource management to the regional or catchment level and to involve local communities …' (Act 36 of 1998: Chapter 7, Schedule 45). Schedules 2 and 3 of Chapter 7 of the Act deal with the functions and operation of catchment management agencies which include the promotion of community participation. The water users associations, on the other hand, 'operate at a restricted localised level and are in effect co-operative associations of individual water users who wish to undertake water- related activities for their mutual benefit.' (Chapter 8, Schedule 30). As the name implies, WUAs are supposed to represent all water users – industrial, domestic, commercial farmers, small-scale farmers, as well as farm-workers (Conradie *et al.* 2001), and are supposed to undertake activities for their mutual benefit.

Before transferring water from one catchment to another, before any major development can take place in a catchment, or when licences for water use are issued, the WUA must be consulted. As a statutory body it can raise funds for improvements in the catchment.[22] A WUA may operate and control abstraction and/or distribution; manage certain dams, rivers/streams, groundwater use and effluent control within a quaternary, tertiary and/or secondary catchment that could have a detrimental impact on their source. Under the 1956 Water Act these functions were previously fulfilled by irrigation boards that were primarily bodies that represented the needs and preferences of an economically active elite agricultural constituency.[23] In summary, WUAs are being established in the catchments to perform the local management of water use under the authority of the CMA. The importance of these local statutory bodies is that decisions are made at the local level after consultation with all parties

[21] Besides the two statutory bodies that are prescribed by the Act, water boards also play critical roles in the delivery and maintenance of water. Their functions are set out in the Water Services Act of 1997 but their primary function is to provide efficient, reliable and sustainable water services.

[22] For example, clearing of alien invasive vegetation operations.

[23] Section 98 (4) of the NWA provides that within six months of the commencement of the Act (i.e. no later than 31 March 1999) a board must prepare and submit to the Minister a proposal prepared according to sections 91 and 98 (4) of the NWA, to transform the board into a water user association (DWAF 1998a, p. 2). According to DWAF (1998a), due to a large number of institutions involved, the Minister has extended the time limit to 29 February 2000 (*ibid.*). In April 1999 a notice of extension of time period was given, extending the original date of 1998 to August 1999. Source: http://www.dwaf.gov.za/Documents/Notices/TIME.doc.

involved. The powers invested in WUA are considerable, because, for instance, a WUA is able to shape the pricing policy according to local conditions as long as these tariffs are within the national framework.[24]

As WUAs formalise the provision of water not only for irrigators but for all water users, farm-workers, who were historically serviced by the owners of the farms who supplied them with water, now have legitimate claims to water. Farmers are now obliged to supply their workers with water services, but they also reserve the right to be paid for these supplies and services.[25]

The importance of WUAs has been stressed because these are statutory bodies and they are representative of local needs. WUAs are part of the strategy as laid down in the Act (Section 98 (6) of Act 36 of 1998) 'to establish suitable institutions and to ensure that they have appropriate community, racial and gender representation' *(*Act no 36 of 1998). The contradictions between rhetoric and process and the tensions between policy and practice are apparent in these systems. As these bodies are empowered to act as authorities, albeit under the jurisdiction of the CMA, it is critical that they are representative of all stakeholders in the catchment. These micro-management systems mirror the process of building a CMA and the complex set of social interactions that are taking place in the Breede-Overberg WMA.

One of the intentions of retaining powers at the central level is to ensure that local elites do not dominate (MacKay 2003), but the retention of power at the central level is working against democratization and has the unintended consequence of embedding old elites in new systems. The problem of the top-down interventionist style has created tensions and resulted in lost opportunities for trust production. The case of the Cogmanskloof Water User Association, serves to illustrate this.

[24] The extent to which this 'shaping' is really possible will be taken up in further chapters
[25] Conflicting opinions from municipal officials: one is that it is the responsibility of the private land owner, the farmer, the other that it is the municipality's responsibility. Responses to market pressures play an important role, for according to international norms and standards and farms that do not comply with international norms and standards do not qualify to export their produce

Templates from above

Cogmanskloof Irrigation Board maintains a pumping scheme that was commissioned in 1981 to supply water to farmers in the Montagu and Ashton areas of the Breede. The irrigation district is situated around the towns of Ashton and Montagu. The security of supply is dependent on the Greater Brandvlei scheme (DWAF 1998b, p. 22).

The transformation of Cogmanskloof from an irrigation board into a water user association raises a number of concerns. Schedule 91 prescribes what must be included in the proposal for the establishment of a water user association. Members of the pre-existing local irrigation board worked long hours to agree upon and establish the ground rules for the new WUA. After considerable deliberations and eventual agreement, a development plan for the Cogmanskloof catchment region and a proposal for the establishment of the WUA was submitted to the national office in Pretoria. The plan was returned to the chairperson, after considerable delays,[26] with a suggested template/blueprint, from a very different WMA, of a water user association proposal. A letter was attached with the returned proposal explaining the procedures for how water plans should be written up and that the words should be used exactly as provided in the blueprint accompanying the new plan.

> Why did they not draw it up for us and just ask us to sign? It is supposed to be bottom up but it is not. They are wasting our time and money. (Interview Cogmanskloof Irrigation Board, Montagu, September 2001)

The priority was clearly on the correctness of the formalistic rules, not the generation of substantive policy input from below. The water planning process remained top-down, and the local WUA was unable to gain significant influence within the pre-existing water policy decision-making network. Despite recognition that previous top-down approaches to water resources management are no longer accepted by the general public (WRC 1996, p. 6), nor are they supported by policy rhetoric, this approach persists. In the strong words of Golola (2003) this makes a 'nonsense' of earlier attempts by central government to cede power to local authorities (2003, p.

[26] The plan was reportedly lost in Pretoria. After a long silence, it was dispatched for the second time, causing unanticipated delays and frustration for those water users who had worked overtime to produce the document.

266). The process undermines an opportunity for the state to ensure the responsiveness of its policies and practices because, as Newman *et al.* (2004) contend, state actors are 'dependent on citizens and users to participate in dialogue with them' (2004, p. 217) and could be viewed as a form of governance failure (Bovens in Newman *et al.* 2004, p. 218).

The process also undermined the trustworthiness of the officials of provincial government, representing the national department, who spoke at public meetings advocating local input, control and ownership of the management systems. Confidence in the participation-oriented priorities laid down in both the Constitution and the National Water Act is weakened. The Act has created a space for local players to take an important part in their management systems, but the style of government does not create trust and state-society synergy (Evans 1996) and co-production (Fox 1996) of new management systems is curtailed.

But the establishment of the Cogmanskloof WUA raises other concerns. Although DWAF (2003) is clear that the 'purpose of the WUA is to enable people within a community to pool their resources (money, human resources and expertise) to more effectively carry out water-related activities' (DWAF 2003, p.27), this seems to be an ideal. In fact water users associations in the Breede-Overberg appear to be governed by 'old elites' who have been connected to water policy networks for years, and the transformation from the old to the new produces uneasy trust.

Fox (1996) notes that the institutions that are well organized are often dominated by elites and do not represent local diversity (1996, p. 1091). Synergy between state and society (Evans 1996) is intended to equalise and counteract the tendency of local elites to dominate, but in reality the state has not used its authority for this purpose and the new forms of governance are compromised. Newman *et al.* (2004) observe how conditions such as these mean that the old is not displaced but rather that the old and the new sit uncomfortably alongside one another (2004, p. 218). In this case, the Cogmanskloof WUA is dominated by elites who have been involved in irrigation boards for years. Although the WUAs are intended to include ordinary water users, the nature of the concerns remain technical: maintenance of infrastructure and water schemes, reduction of unaccounted-for water, payment of loans of capital investment

and so forth. The dominant knowledge regime does not encourage the loosening of old network structures to include newcomers.

Network closedness or network fixation (Schaap & van Twist 1999, p. 63) in the social dimension affects the way in which actors are able to relate to one another. Because they fail to recognize the contribution of another actor, or do not consider it to be relevant to the discussion, the opportunity for exchange is restricted. This restriction can be either conscious or unconscious. For instance, in the case of this WUA, informal rules of behaviour have been developed which now regulate the inclusion of actors – without this being made explicit in the formal rules (Schaap & van Twist 1999, p. 63). In the case of the water user associations, the networks remain closed.

> We will not change, we will continue exactly as we have always done.
> (Interview Cogmanskloof Irrigation Board, Breede WMA, February 2002)

It is unclear whether this is a consciously or unconsciously applied rule (Schaap & van Twist 1999, p. 63), but it is put into effect. Votes are weighted[27] – farmers who do not have capital investment in the irrigation canals have less weight than those who do. Schaap & van Twist (1999) claim that 'veto power' is a management intervention that is exercised by certain members (1999, p. 66) and that this is a way of maintaining the status quo and determining the balance of power, and the actors do not 'automatically accommodate the objectives of one actor' despite the fact that this might be ordained by government policy (*ibid.*). The veto power is an instrument of social control where the virtues and values that Bickford-Smith (1999), Ross (1999) and Kvale (2003) investigate, in this case of the water management systems that were in place - the irrigation boards - are maintained. Water users who are subjected to the 'veto' and excluded from decision making are unlikely to challenge the system because they want to remain respectable. Water users who are subjected to the veto are not equal and it is likely that for some of these water users, feelings of shame are more or less intense as it is unlikely that water users who are excluded will feel good about themselves or experience the pride that Scheff (1990) refers to.

[27] The National Water Act, Chapter 8, Schedule 93 ordains that the constitutions for a proposed water user association must contain the voting powers of members.

Termeer & Koppenjan (1999) state that social variation can be influenced by external pressure and the threat of regulation by government (1999, p. 85), but this has not happened. On the contrary, the Cogmanskloof Water User Association is in the process of being legitimised and the opportunity for government to exert external pressure has not been forthcoming.[28] The role of government in creating an environment where those who were excluded in the past from decision making in the domain of water is pivotal for the rules and regulations with which the system legitimizes its actions need to reconcile with the individual who is able to engage or feel part of a system, rather than alienated from it. Heller's (1985) and Williams' (1993), Pattison's (2000) and Scheff's (1990) work on shame is particularly relevant because these authors are alert to the relationship between the self and the exterior, with an understanding that the individual person has a voice and is somebody rather than nobody. These authors are concerned in particular with the dimension of power and a strong authority that is likely, in this case, to be an alienating one. If the somebody is unable to speak, they are made to feel like nobody. The repercussions that feelings of shame or inability to engage in decision making processes have on larger institutions and on the project of reform in the water sector in general is relevant.

Termeer & Koppenjan (1999) propose that there are opportunities for change and that confrontation with other perceptions can be a catalyst for this change (1999, pp. 84-85), but if actors see new ideas as a threat to their interests and values, 'we will not change,' they will not be eager to take them into consideration (*ibid.*). It is in these instances that the relationship between trust and risk, identified by Seligman (1997) and others (Warren 1999; Levi 1996; Luhmann 1979; Offe 1999) is put to the test. Evidently, 'we will not change' implies that there is no place for risk-taking where the issue of power, exclusion and knowledge is critical.

The veto power is a prime example of what Schaap & van Twist (1999) identify as 'conscious social exclusion at the actor level' where the actors are not prepared to provide another actor with resources and therefore refuse to interact (1999, pp. 66-

[28] Despite the direction laid out in Chapter One, Schedule 2 (k) of Act (no 36 of 1998) which states that the purpose of the Act is... to establish suitable institutions and to ensure that they have appropriate community, racial and gender representation.

67). The actors cannot be excluded, because policy will not allow this option to be followed, but a more subtle 'informal' form of exclusion has been adopted. It is understandable that there is a distinction between those who have invested money (and time) in building irrigation canals and those who have not; the distinction determines the status quo of water user association membership and marginalizes those who were already marginalized in the past. The veto power has been determined by a discourse that has structured the reality – in this instance wealth or worthiness is measured in terms of capital outlay and financial gain. It is this reality that configures the institutional culture of the Cogmanskloof WUA and becomes an authority that can produce feelings of not fitting in for those who are marginalized and who, instead, experience shame based emotions. As Schaap & van Twist (1999) maintain, certain aspects of reality have been emphasized at the cost of others (1999, p. 76).[29]

The status quo will only be equalized when actors become cognitively open to other frames of reference. Actors become subjects and are given a meaning as the culture of the network contributes to the inclusion but also the exclusion not only of actors but of their views. A process of inclusion encourages the 'agency-shaping' or 'agency-enabling' potential of water users (Offe 1997, p. 27). As Ostrom (1996) notes, when groups work together they enhance abilities to learn from one another as they exchange information about what works and what doesn't work (1996, p. 229). This would be an ideal to strive for, but it is dependent on an exchange of knowledge and equalizing of power. Culture functions in a structuring way (Schaap & van Twist 1999, p. 77).[30] The WUAs have a culture of irrigation boards, and those who are not part of that culture are, for the moment, distanced from the dominant network culture (*ibid.*).

Theoretically catchment management agents, at the WMA level, and WUAs, at the localised level, are able to represent local diversity, but this is not happening in reality, a situation that can offset the iron law of oligarchy (Fox 1996, p. 1091), reinforcing government rather than governance. The spaces that are created, such as

[29] Schaap & van Twist (1999) refer to discourse analysis an important aspect of policy networks and the dimensions of power that are part of them.
[30] See also Levi Strauss (1987) and Turner (1974).

stakeholder committees, reference groups, stakeholder forums or the statutory bodies, theoretically provide opportunities for diversity and multi-stakeholder representation, but this is not happening as planned. The style of government is top-down and the effect is neither positive for democracy nor conducive to the building of trust (Grootaert & van Bastelaer 2003; Krishna 2002; Warren 1999).[31] Although democratic policies are present, the democratic process has not yet been acquired. Further empirical data, presented below, has been gathered from the plenary sites that form part of the CMA process, local government and finally from a localised sub-catchment, the Palmiet catchment in the Overberg.

Palmiet catchment management plan

The Palmiet Catchment Plan, initiated by the Palmiet steering committee, is composed of six management units, Eikenhof, Arieskraal, Klein Palmiet, Solva, Kogelberg and the estuary, with the following priority issues: riverine ecology, water quality, land use, siltation, water allocation and water demand management, and social issues. The catchment plan is designed to ensure that the water in the Palmiet River is managed in a sustainable way. MacKay (2003) proposes that writing a catchment management strategy, business plan and submitting annual reports is one way of ensuring that local elites do not drive and dominate the water agenda in a WMA (2003, p. 64), and MacKay (2003), like Ostrom (1996), claims that with these procedures in place, it should not be necessary to control the process any further. In reality, however, there is disjuncture between local procedures that are in place and national procedures that lag behind. Local actors, in the case of the Palmiet Catchment, were well organized and ahead of the national actors and they put together the catchment management plan for the Palmiet by June 2000, after much deliberation and discussion between themselves. But, according to local actors, the rules of the game were changed by central government and controls were put into action because the National Water Resource Strategy (NWRS)[32] was not yet in place. According to national actors, the plans were stopped because the catchment committee was not representative and local elites were dominant, in particular, the interests of wildlife

[31] See also Selznick (1949) and Kotze (1997) who expand on themes of top-down versus bottom-up decision-making.
[32] First draft edition was 2002. Final NWRS scheduled for release April/May 2004.

and nature conservation took precedence over the supply of water for irrigation and basic human needs.

> There are interested parties that want to make themselves rich off the process. They are gatekeeping and they have an advantage because they have been involved in environmental things and they don't want to let others come in now. These people defend their turf and they are not true conservationists but they are there for power. (Interview: Committee, Overberg WMA, Onrus, February 2001)

Whatever the reason, contradictions are rife and local water users perceive that on the one hand government at the national level encourages and drives local innovation, initiative and process, but on the other hand restricts and curtails it.

Stakeholders involved in building the CMA at the local level are uneasy about decisions taken by officials at the national level. Water users are also distrustful about the power invested in the Minister and the way in which DWAF is able to determine the reserve, allocate water and influence and control water matters that affect their lives. Opportunities for trust-building between government and local water users were, at least temporarily, compromised when the catchment management plan was stopped, and these water users were frustrated due to poor communication between local and national actors that caused the delays (at best) or the incompetence (at worst). Cooperation and trust that was being built between water users in the localised Palmiet watershed area was undermined when their local planning activities were curtailed.

The state acting through the Minister has the public trusteeship of the nation's water resources. Schedule 3 of the National Water Act (no 36 of 1998) confirms that 'the National Government, acting through the Minister has the power to regulate the use, flow and control of all water in the Republic.' Schedule 4 of this Act overrides all existing rights as laid down in other laws; '… this Act replaces any right to use water which that person might otherwise have been able to enjoy or enforce under any other law'. And in Schedule 7, 'The Minister, The Director-General, an organ of state and a water management institution, must give effect to the Reserve as determined in terms of this Part when exercising any power or performing any duty in terms of this Act'. Such schedules protect the state and imbue it with the ultimate power to

override decisions made by statutory bodies at the local level or local government as per its constitutional duties. This persistence can be interpreted in either of the following ways: that the state maintains the right to protect the public and ensure public good or that the state maintains the right to protect its own interests and to ensure that decision-making is not devolved to local level.

The process is a complex one. The Palmiet River Catchment Forum, responsible for the plan, focuses on controversial developments in the catchment and in particular on the demand for transfers to the adjacent Berg WMA in order to meet the needs of the expanding city of Cape Town. But Palmiet water users, making economic contributions by producing agricultural goods in the Elgin and Grabouw areas of the Palmiet Catchment, feel that their needs are not prioritised. In the words of one disgruntled water user:

> Cape Town always wins. (Interview: Onrus, Overberg WMA, February 2001)

The Breede has a population of approximately 380 000 people with irrigated agriculture as the main user of water. The Berg WMA has a population of over 3 million people with most of these living in the Cape Metro and water use divided between the Metro and irrigated agriculture.[33] Cape Town is expected to grow by between ¾ and 1½ million people by 2025 whereas estimates for the Breede WMA are declining figures, with the exception of Worcester. The Western Cape has 10% of the national population, produces 15% of the GDP and generates 25% of all tourism earnings. It is likely that the relative importance of agriculture will decrease in the Breede WMA over time.[34]

These statistics reflect the difficulty of 'fair' allocation. From DWAF's perspective (DWAF 2004) the national perspective must be overruling as it is at this level that the needs of mobile populations (and their effect on urban growth), tourism and national interests, and the economic wellbeing of the country can be protected. DWAF considers selling water to the Metro is also an economically viable business.

[33] BRBS stakeholder committee *ad hoc* meeting. Record of key points and discussion, August 2001. Also in Breede-Overberg CMA Reference Group Meeting, August 2001.
[34] *Ibid.*

Walk but don't run?

The Water Law Review Process identified one of the major obstacles to achieving Integrated Catchment Management as the lack of appropriate experience and inadequate involvement of all stakeholders in a given catchment (WRC 1996, p. 30). The same source expressed doubts that South Africa has, at the present time, 'sufficient expertise and skill at the local level, which can be utilized in catchment authorities (WRC 1996, p 35). The WRC (1996) is of the opinion that the disadvantages of local level involvement outweigh the advantages (WRC 1996, p. 46) and that the 'appropriate expertise, experience and judgments are not likely to be available within stakeholder communities at a catchment level' (*ibid.*). It is likely that the lack of faith in local capacity has allowed for stronger control from the centre, but the result has been an erosion of trust at the local level – by both state and non-state actors. This vision or cognitive closedness is a symptom of what Schaap & van Twist (1999) identify as an inability rather than unwillingness to see (1999, p. 65), because from the perspective of the local water user local expertise in the Overberg WMA is not lacking.

These doubts, that are overriding, are therefore inappropriate in the case of the Breede-Overberg. MacKay (2003) notes that there will be pockets of success depending on local capabilities and that 'at present, the Western Cape appears to have the best potential for success' (2003, p. 81). Adopting a 'one size fits all' (Tapscott 2003; Pritchett & Woolcock 2004) approach erodes trust building opportunities as it negates individual competencies and efforts. In the Breede WMA water users are discontent because DWAF imposes 'experts', at great cost, to perform tasks such as the measurement of in-stream flow requirements.

> We can do it by ourselves. The people who live here can get on with it and we don't need outside experts or 'Sun City[35] consultants'. All we need are guidelines from DWAF. We can do the job ourselves. Pretoria is taking all the decisions. Why are they determining the reserve? It is absurd that Pretoria must be making decisions about the reserve. Local people know what amount of water should remain for the reserve and it is different per region. It is wrong to lay down as one of the principles of the National Water Act that the Department has the right to allocate the amount of water needed for the reserve. This should be determined by

[35] Sun City is a well known South African casino and holiday resort.

> local experts. Will government ever hand over control? (Interview: Onrus, Overberg WMA, February 2001)

Opportunities to build trust between local water users and government in the Breede-Overberg WMA do exist, but these opportunities are lost when DWAF sidesteps local experts and imposes their own selected 'experts' to perform tasks that could be performed locally. This then erodes opportunities to develop trustworthiness, where people are able to monitor the accountability of their own members (Ostrom 1996, p. 229). It undermines what Offe (1997) terms 'agency-shaping' (1997, p. 27). Trust is slow to build, for the style of government reflected above mimics the 'golden age of supply-sided management' or the 'hydraulic mission' era in the history of water (Turton 2001, pp. 5-6).

Opportunities to share competencies and synergy between the state and local actors exist, but these opportunities need to be nurtured (Ostrom 1996), and a style of government that is less interventionist would do better to foster trust between government and water users (Stompka 1999).

Progressive policy is more likely to produce trust, but, although South Africa's water policy is progressive and has been, as noted above, heralded as in fact one of the most progressive in the world (MacKay 2003), trust is low. There is good reason to bring decision-making closest to the water users who are influenced by the decisions and the policy makes provision for systems, institutions and people to participate in water management closest to the local water user. Agrawal & Gibson (1999) argue that actors in the local space are better placed to make the rules because it is these actors who are in possession of specialized information about local context and resources (1999, p. 638). But the centre is in control. The role of local players, be these water users who come together in the context of a statutory localised body such as a water user association, local authorities struggling to implement DWAF policy at the municipal level, or water users developing catchment plans, is under-developed. Although there might well be a gap in local capabilities and an inability to innovate it is also likely that, as Gran's paper on professionalism in African settings assumes (2001) 'the room will be filled rather quickly' (20001, p. 17). It is unhelpful to assume that lack of innovation means that it is not latent. The inquiry into systems,

institutions and people in the Breede-Overberg WMA confirms MacKay's (2004) assumption that there are pockets of capability and expert skills.

Coordination between departments at the local government level and between local level stakeholders and central government and central government and local government is inadequate. The analysis suggests that water policy lacks substance in its ability to enforce overall vague notions of localised water user participation and that vagueness provides an opportunity for central government to maintain control in the water sector. Central government emphasis appears to be more directed to outcomes rather than process. Process requires strenuous efforts to ensure the transfer of authority and not only managerial power to local water users and to encourage negotiation on terms of equality – so that, as Agrawal & Gibson (1999) advise, government officials and community members, based on a notion of diversity and contested meanings – are held accountable (1999, p. 641). In the case of the Greater Hermanus Municipality, it is possible that a broad-based user group, supportive and included in local government decisions, could better demand accountability and reduce friction between departments at the local level. But one of the more fundamental structural problems is the separation of water services (Water Services Act 1997) and water resources (National Water Act 1998). The forums that are built as part of the CMA process do not provide opportunities to discuss water delivery and the principles that are part of Integrated Water Resource Management are poorly integrated into local development plans, despite the emphasis on local governments to produce Water Service Development Plans (DWAF 2004).

There is a requirement for consultative processes and synergy between a range of actors and a focus on process rather than outcome would go a long way in the production of a state of high trust in the water sector. The process is presented in the diagram below:

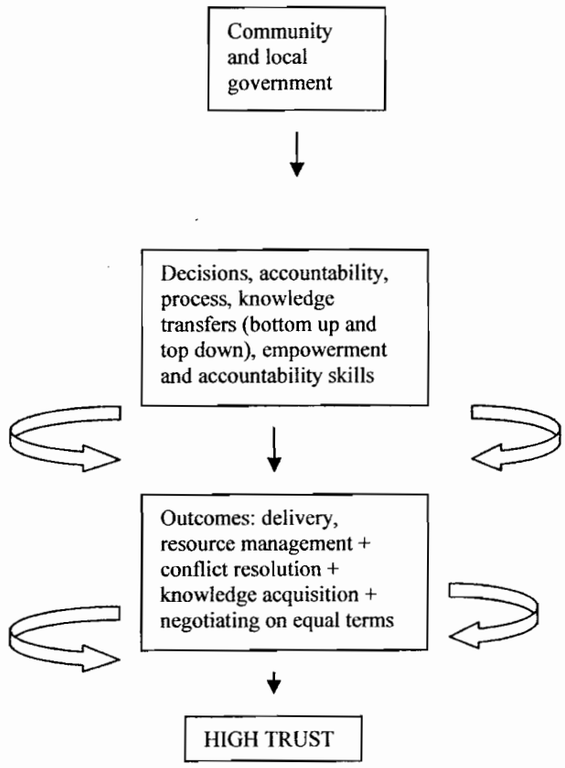

Figure 3: Ingredients for the development of high trust

Agrawal & Gibson (1999) warn that the need for certainty and controlling outcomes results in the 'same utopian longings' that identify community as the solution to problems of conservation (1999, pp. 640-641) where a 'reasonable process' of decision-making is implemented rather than guaranteed outcomes (*ibid.*). Accepting that communities are dispersed, not only geographically but in their interests, is critical (Fox 1996, p. 1091), and the commercial farmer group is by no means homogenous, nor do the 'previously disadvantaged' all have common interests. But in taking note of the heterogeneity the emphasis should then shift more evenly from outcomes to process. This is, as Ostrom (1996) advises, an investment that needs to be carried out over a long time (1996, p. 229).

There is empirical evidence that the style of government is reminiscent of a low-trust society. In the spirit of paternalism, or the 'hydraulic mission' epoch, the process of building statutory body corporates to manage water at the level of a WMA is not *adhoc,* but is organized from above. The observations reflect a climate of low trust

that is unsurprising because, as Putnam (1993) warned, hierarchical, unresponsive, centralised bureaucracies seem to corrode interpersonal trust.

Summative remarks

Marais (2001) notes that because the reconstruction and development of the nation was perceived to be a 'common endeavour' it was deemed important to encourage 'restraint' on the part of the popular sector in the demands that they made or changes that they pursued (2001, p. 94). It was preferable therefore to 'reconcile' differences and compromise on conflicting interests. According to Marais (2001) some of the solutions were found in providing new opportunities 'political and social spaces, seeking reconciliatory positions that minimized conflict and restructured state civil society relations' (2001, pp. 96-97). Although this argument points to a 'reasonable' approach adopted by government, it is unlikely that actions are led by rational decisions to steer away from conflict and to be reconciliatory, but that they are rather likely to be the result of inadequate experience and practices of any other way to operate. Klijn's (1999) question is fundamental: 'under what conditions would these rules and resource divisions change' (1999, p. 33)?

Levi (1996) emphasises that political power, vested interests and national government institutions can undermine the possibility of local institutional solutions (1996, pp. 241-242) and the empirical data also suggests that, at this stage of the implementation of the National Water Act, local institutional solutions have been undermined by over -involvement of national government.

Lowndes (2003) states clearly the problems that arise when managerial tasks have been increased at the local level without ceding authority to those responsible for implementing the tasks. And so there is distrust between different segments of water users, between government and their consumers and between government officials. Transformation, particularly of local government, is riddled with problems of redesign as old systems and institutions are restructured, reshuffled and replaced by new ones to achieve the required changes in the water sector. Stakeholders involved in building the CMA at the local level are uneasy about decisions taken by officials at the national level.

Water users are distrustful about the power invested in the Minister and the way in which DWAF is able to determine the reserve, allocate water and influence and control local water matters. In the light of these fears, water users prefer old water policy networks where they already have 'credit slips.' They are hesitant to venture into new terrain, and segmentation and network closedness in the water sector is prolonged.

> Closedness in the social dimension occurs when certain actors are excluded from the interaction... In that case, the range of possible links between actors in the network is consciously restricted. (Schaap & van Twist 1999, p. 63)

Introduction

This chapter continues to expand on the features that were covert in the trust discourse developed in Chapter Two, and further develops the themes of democracy and participation that constituted the closing arguments of that chapter. Chapter Four was tasked with elaborating three themes: synergy between actors, style of government and bureaucrats' resistance to change. The current chapter promotes these important topics by featuring in particular the following four facets: 1) participation, 2) knowledge, 3) power, and 4) agency. The discussion makes explicit the interconnection between these four features and the constructs of trust and of shame. The empirical data proffers that participation, knowledge, power and agency are critical components of the attitudinal construct of social capital, trust – and advances the argument that shame belongs alongside trust – both being important determinants of social action.

In the course of the discussion that follows, theoretical notions put forward by theorists are further specified and critically grounded in data in selected case narratives taken from the case study area of the Breede-Overberg. Despite ample evidence that the theoretical analysis is both relevant and useful in understanding the social processes that are taking place in the water sector, there are tensions between the theory and the grounded narratives. In the ideal, it has been proposed that institutions, committees, forums can have positive effects for democracy but the data reflects the problematic manifestation of these and other ideas put forward. Is risk conducive to trust production or is it trust-averse? Under what conditions does risk impel trust and under what conditions is it a repellant of this feature? Is the trust that we are observing in the field the same trust that Seligman (1997, 2000) identifies as a feature of modernity, or is it the reproduction of familiarity, kinship or neighbourhood ties or what Offe (1997) calls 'primordial units' that are not bridging old alliances but reinforcing them? What is the relationship between knowledge and trust? Is there a

relationship between common knowledge regimes and trust or is there trust across knowledge domains? And is knowledge intentionally or unintentionally withheld with the purpose of reproducing familiarity and decelerating change?

Chapter Five consists of an introduction, eleven subsections and a conclusion. The eleven subsections are as follows:

1. Knowledge, power and agency
2. *Erkenntnisinteresse* or knowledge interest
3. No recipes for getting to Pretoria
4. Style of government revisited
5. Filtering effect of the frame
6. Localised expert knowledge
7. Stoep talk breaks bounds of 'acceptable limits'
8. Impenetrability of 'real' world out there
9. Reinforcing patterns of inclusion and exclusion
10. Honour, shame and trust
11. Schizoid transformation process

Introduction

Participation is critical to the transformation process which is about redressing the inequalities of the past by including those who were marginalized and excluded from benefits and rights as citizens of the nation. This chapter is burdened with tackling the critical features of **knowledge, power and agency**, for it is the absence of knowledge, the unequal power relationships between water users and the inhibition of agency that thwart the procedure of participation because the production of trust is inhibited and at times feelings of acute shame are activated.

The discussion demonstrates that the production and use of knowledge and power are interconnected. Power cannot be equalised until different types of 'expert' knowledge are exchanged, but there are no quick fixes or ready recipes for how to do this. Style of government is a recurring theme in this text, for the top-down management style of the authority is not an equaliser of knowledge and power and, on the contrary, it inhibits trust between water users and makes the change from the old to the new more

difficult. The style is manifest, for instance in the following manner: overload of information, preset agendas and through the filtering effect of the frame of reference that defines what is acceptable and what is not acceptable for debate.

New institutionalism in organisational theory presents institutions as contested, contradictory and conflictual sites, but the distinction between formal and informal institutional space is understated in the theory, yet blatantly apparent in reality. Although the formal spaces are controlled and covert contradictions and tensions between members are pruned, a stark contradiction appears between what is said and what in fact happens. But the most pronounced contradictions and tensions are in the interstitial spaces outside the formal venues where there is dissidence, debate and discussion. The data below expands on the formal and informal institutional settings and shows how these settings are intimately connected with the notions of knowledge, agency and power.

This chapter is also tasked with examining non-participation and the consequences of non-participation, in particular the constructs of trust and shame and their roles as determinants of social action are scrutinised. If institutions are sites where trust is to be produced then they fail in their goals when informal spaces are the only places where people have a voice. In the interstitial spaces, new social capital is not built for the old formations and social fixations and dominant power relations, recognised so well by Fergusson (2004, p. 291) and others (Newman *et al.* 2004; Williams 2004; Briggs & Sharp 2004; Parfitt 2004) are reconstructed and reproduced. Power is equalised in the informal institutional spaces, but it is equalised within groups and not across groups. Water users feel free to share ideas and to make evident their choices, dissents and differences, but these remain in group, between members with common interests and shared norms (Dasgupta 2000; Grootaert & van Bastelaer 2002; Krishna 2002; Warren 1999; Woolcock 1998; Granovetter 1983).

'Universal', 'technical', 'objective', 'public sphere' desirable knowledge is contrasted to local, 'specific', 'subjective' or 'private sphere' knowledge. The data suggests that the use of universal knowledge predominates over the specific localised knowledge regime. The following section, on knowledge, power and agency, portrays the effects of exclusion and how this undermines the principles of Integrated Water Resource

Management. The section also presents what is called a schizoid transformation process where trustworthy others who have been given the authority to act on behalf of water consumers, for instance councillors and community leaders, are called on to assume roles that they are unable to meet. Yet in order to retain trustworthiness they dissemble their inadequacy in grasping the 'desirable knowledge', the 'facts' and in order to remain 'respectable' or honourable in the eyes of their constituency, deceive themselves and others.

Knowledge, power and agency

Ribot & Peluso (2001) define well how knowledge is central in determining who can benefit from which resources (2001, p. 12). But there are barriers to acquiring knowledge and the distinction between knowledge and information is blurred. The information that is made available to water users is 'scientific', largely 'universal' and a large proportion is devoted to the protection, use, development, conservation, management and control of the resource (National Water Act, no 36 of 1998, Chapter 2, Part 1, Section 5 (3)). In other words, the CMA focus is predominantly the management of the resource rather than the delivery of basic services (water) which is the most pressing need for the poor.

The propensity of government officials – or their spokespersons – to provide an environment where people gain knowledge and capacity to evaluate the reasonableness of the rules (Cohen & Rogers 1992, p. 417) and participate meaningfully is, as Giddens (1990), Desai (1994), Parfitt (2004), Newman *et al.* (2004) and Offe (1997) assert, closely connected to features of power and knowledge. Paulo Freire (1972), over thirty years ago, maintained that education for liberation must be a process of problem-solving and dialogue among equals. Freire's (1972) point is about knowing how to confront a strong and old tradition of transferring knowledge (1972, p. 10) by critically examining text so that reality is 'illuminated' in a reflexive process (1972, p. 13). In other words, the critical part of the transfer of knowledge is it's penchant for illuminating reality and for enabling reflection. But this reflexive process has not yet been brought into the sphere of integrated catchment management in the Breede-Overberg WMA. There are clear voices (Newman 2004; Williams 2004; Parfitt 2004; Woolcock 2004) that proclaim that meaningful participation

involves more than just having a toolkit with which to solve problems and that it is a process through which power is made more equal and meaningful dialogue is encouraged. Notions of participation as they are manifest in the Breede-Overberg WMA remain impoverished.

Cohen & Rogers's (1992) emphasis is that good information[1] sharing improves the ability of citizens to deliberate and clarifies why certain policies are necessary (1992, p. 424), and it also has, as Newman (2004) suggests, the purpose of creating dialogue between state and non-state actors. State actors are dependent on citizens and users not only so that they can ensure the responsiveness of their policies and practices and render the policies legitimate (2004, p. 217) but because synergy between state and non-state actors is the better way to achieve sustainable development (Ostrom 1996; Evans 1996; Evans *et al.* 1985; Rueschemeyer *et al.* 1992; Levi 1996; Sztompka 1997; Tarrow 1993).

In the domain of water, learning about the water cycle and the effects of patterns of water consumption on people and the environment is crucial if water users are to be able to make choices and be active in decisions concerning water management. In order to be responsible agents in the domain of water, for instance to report leakages, conserve water, decide which level of water services can be afforded or to maintain responsible hygiene and health practices, minimise pollutants to ground water and so on, water consumers need to have knowledge about a range of water issues (Pollard & du Toit 2003). But it is also important that those with 'scientific' knowledge and expertise in these areas gain knowledge about the living conditions of the poor, for it is the ability to access knowledge across domains that is useful (Barberton 1998; Vroom 2002).

Appropriate knowledge transfers enable water users to make choices and to be active agents in the forums that they are invited to attend. It is assumed that as people feel included they are able to build trust between one another, across segments of water users and not only within segments of water users. Although

[1]Knowledge and information are used loosely by many theorists. Cohen & Rogers's (1992) use of information is taken in the sense of knowledge although they too use the term loosely.

the trust literature alludes to notions of power, in particular, Granovetter (1973, 1985) and Portes (2000) who acknowledge unequal status and access to economic gains as being intimately connected to trust, it is sparse in its explicitness of the linkages between knowledge, agency and power. The contribution that is made in the discussion that follows is to emphasise the way in which these three features interlock and how critical the interconnectedness of knowledge, power and agency is for the production of trust and the development of new networks.

Erkenntnisinteresse or knowledge interest

Giddens (1990), Desai (1994) and Offe (1997) recognize that knowledge and the process of agency-shaping or agency-enabling are intimately connected to features of power. Information sharing can equalize partners and groups whereas unequal access to knowledge exacerbates, as the empirical evidence below so clearly illustrates, in-group and out-group dynamics (Scheff 1990; Serageldin & Grootaert 2000). Vroom (2002) refers to what is known in German as the *erkenntnisinteresse* (knowledge interest) that divides the domain of the non-scientific – the average practioner's experience – with that of the 'scientific' (2002, p. 55). The contested terrain of knowledge and information is pervaded by 'ideological controls and discursive practices, as well as negotiated systems of meaning' (Ribot & Peluso 2001, p. 12) which shape the way in which actors are able to engage with one another. Parfitt (2004) notes that tools deployed to drive participation and equalize power relationships operate largely in the public domain and as such they reinforce the exclusion of women's issues (2004, p. 544). The recurring themes in integrated water resource management, reticulation pipes, weirs and pumps, stream flow regulations and ecological requirements are part of the dominant water sector discourse and are distinctly alienating for those who do not master the language.

Knowledge includes those who have it and excludes those who do not. The acquisition of knowledge is itself a process and there are no blueprints as to how it can be achieved. Eade (1997) links knowledge to self-esteem and argues that awareness and the capacity for political action mutually reinforce self-esteem. (1997, p. 11). With the right information, the marginalized have the right – and, importantly, the capacity, to organize and to challenge authority (*ibid.*). Self-

esteem and a sense of self in turn reinforce trust and reduce feelings of shame (Scheff 1990, pp. 92-93). The link between meaningful transfer of knowledge across domain, high trust and absence of shame-based feelings is critical.

No recipes for getting to Pretoria

Not only irrigation farmers but many of those who are involved in water management wrongly presume that management of irrigations systems, including weirs, canals, dams and so forth, equals water resource management (BRBS 2000, p. 3), thus continuing to reinforce the dominance of the hardware system of understanding water. Although there has been an ideological shift in focus to people, the problem in the Breede-Overberg WMA is that the old way of doing things has not yet shifted, and the empirical evidence points to a gap between the ideological vision about rights to participation and equality enshrined in the Bill of Rights and in the National Water Act (no 36 of 1997) and the Water Services Act (no 108 of 1997) and their practical implementation. The Water Law Review Process (WRC 1996) states unequivocally that 'where individuals may lack the necessary skills for full participation, the lead agencies must take responsibility for assisting with their development and application' (1996, p 2).

The discourse of the lead agents for change in the water sector alienates many water users whose most urgent needs are for basic water supply, and despite changes in the regime, many water users in Breede-Overberg continue to be deprived of water.

> There are no standard ingredients or recipes, find some landless farmers or women refugees, start with income generation, the stir in some literacy classes followed by a drop of social organization, a pinch of conscientisation, and finally a sprinkling of management training. (Eade 1997, p. 28)

An interactive process allows for creative responses and interchanges between different segments of water users so that water policy can 'better fit local needs' (Palumbo & Colista in Brynard 2000, p. 169). But seemingly, provincial government officials are making policy fit by driving and implementing change rather than 'reinventing' it in an interactive way. The sense of achievement is that the Breede-Overberg is almost ready to submit the final proposal to Pretoria, following closely

behind the Inkomati CMA that was launched on 30 March 2004 in Nelspruit. The forerunners feel pride that they are achievers and that they are ahead of other WMAs.

The focus is top-down, giving preference to those who have been charged to carry out policy rather than on exchanges with water users who could be responsible for formulating it (Lipsky in Brynard 2000 p. 169). The numerous meetings that are part of the CMA process in the Breede-Overberg are supposedly, in the spirit of the law, agency-enabling and agency-enhancing opportunities where there is 'mutual respect, compassion, comprehension and appreciation of fellow members' (DWAF 2001c, p. 5). These attitudes are important cognitive and emotional attributes that act as contributors to a common vision and trust-building. But the erstwhile top-down implementation paradigm with its 'interventionist impulses (Hart 2002, p. 260) continues. Trust-building is constricted.

Style of government revisited

Agency-enhancing opportunities are few and far between and trust amongst water users in the Breede-Overberg is difficult to broker for a number of reasons, such as: 1) style of government, 2) nature of the language and knowledge regime, 3) agendas are preset, 4) information overload and 5) deep social cleavages and segmentation. Sztompka's (1997) consideration of style of government as one of the seven important determinants of a culture of trust was discussed. Sztompka (1997) asserts that a style of government that is both nurturing and inclusive will foster a culture of trust. It is significant that Williams (2004) speaks of participation as a new 'tyranny' whereby the previously marginalised are mainstreamed but that this takes place in a way that binds them 'more tightly to structures of power that they are not then able to question' (2003, p. 563). In referring to participation as a 'tyranny' the effects of style of government become far less benign and can be considered as a way of ensuring that the marginalised are 'mainstreamed', and lose, rather than gain, power.

Change from a non-inclusive and interventionist style of government is particularly important within the South African context where distrust is imprinted in the historical memory of the majority of South Africans. Ineffective public sector performance may, as Bruijn & Ringerling (1999) suggest, undermine legitimacy (1999, p. 154), and ineffective performance in the arena of communication and

information-sharing certainly undermines trust. From Williams's (2004) analytic perspective, the performance would be considered as 'effective' and not ineffective public sector performance because it has achieved its intended purpose of retaining power. Brynard (2000) in agreement with others (Ostrom 1996; Evans 1996; Agrawal & Gibson 1999) recognizes that both top-down and bottom-up forces exist simultaneously and appreciates that both sides theoretically at least should be shaping the way in which policy develops. The cross-fertilisation suggested by these theorists remains in the realm of ideas, for the style of government is overwhelmingly top-down and, as such, discussions and sharing knowledge is curtailed because the exchanges are as Katerere (2002) notes, controlled (2002, p. 23). Selznick's (1949) idea of co-optation as a process that absorbs actors into the system in order to avert threats to the stability of the system (1949, p. 13) is supported by Katerere (2000) who identifies a strategic position that authorities take in order to appease communities or stakeholders by bringing them on board (Katerere 2002 p. 34), and once they are on board to reduce frustrations by having the business of transformation and building water management systems, in this case, interrupted.

Selznick (1949) elaborates on informal and formal co-optation, arguing that the two types of co-optation represent a state of tension between formal authority and social power (Selznick 1949, pp. 13-15). The type of co-optation that is evident in the water institutions is formal as the bodies must be seen to be legitimate (*ibid.*) and water users who qualify as 'previously disadvantaged'[2] have been co-opted into the formal meeting-spaces.

Information overload crowds out the space for meaningful exchanges. There is very little contestation around any information that is passed 'down.' This is contrary to what is said:

> It is here today that you have the opportunity to comment and input into any of the issues that are shown and to say whether you are happy with the process. We expect you to give your input… (DWAF official Breede WMA Stakeholders forum, November 2001).

[2] With a conscious gender skew as the 'previously disadvantaged' are predominantly male.

The extract above that includes the words 'we expect you to give input' is a symptom that DWAF is succumbing to the overriding temptation to follow a 'recipe' (Eade 1997, p. 28; Pritchett & Woolcock 2003, p. 202). The following extract largely contradicts the first one, as for the following response to questions is not unusual.

> Let's get a move-on. We must just press ahead otherwise we will never advance and only go backwards. This is not the place here to discuss these matters. People can discuss things later – we must submit the plan and we are getting there (DWAF official, Breede WMA Stakeholders Forum, November 2001).

Newman *et al.* (2004) refer to this as 'fobbing off' or a process of deflection (2004, p. 214). There is almost no time for questions or additional input from members that is of any significance. Schaap & van Twist (1999) refer to this type of language as closedness or unwillingness to perceive from the frame of reference of actors who are not considered part of the 'in' network. These authors refer to phrases such as 'we're not discussing that now', and 'you can't consider every angle' as being symptomatic of this process of exclusion and closedness (Schaap & van Twist 1999, p. 64). Utterances of this nature reveal that actors are closed to different meanings because either they are unwilling or unable to perceive the view of another that might differ from their own, and as the post-modernist Lyotard (1979), contends 'there are things that should not be said' (1979, p. 17). Schaap & van Twist (1999) adopt the position that such language is symptomatic of a 'conscious strategy to reduce complexity' (*ibid.*). Government officials are reluctant to open up discussions and to reconsider a strategy for the CMA as 'we will never get anywhere that way' (DWAF official, September 2001).

At these formal meetings, there is a contradiction between the appraisal of notions of participation and the unwillingness to put beliefs into practice (Desai 1994, p. 227). For example, Karar, in a position paper for DWAF (2001c) on the establishment of catchment management fora, remarks that although the fora are water-orientated, more often than not, more pressing issues might need to be addressed and that a catchment strategy should be holistic and should be able to encompass the vision for the catchment 'including aspirations for basic needs, development and growth' (Karar 2001, p. 5). Aspirations for basic needs, development and growth include also the

needs of those who remain in the domestic sphere, the wives and mothers whose private water issues, such as absence of toilets, inadequate washing facilities, poor quality drinking water and so forth, are of a private nature and require exposure in the public sphere (Parfitt 2004, p. 544). But this is not happening.

Rothstein & Stolle (2003) identify fairness and impartiality of public servants as a critical component for the building of trust (2003, p. 192), but when the interests of some are amplified and the interests of others muffled, public servants are not giving equal opportunities for trust-building to all stakeholders. According to Offe (1997), as institutions can be, at least in the ideal, mediators and generalisors of trust (1997, p. 18) and again, in the ideal, are what Ingelhart (1999) notes as important factors in the emergence and development of trust or distrust, they have the ability to provide an opportunity for dialogue (Ellison 1997). The role of public officials in the transformation is to create an enabling space for institutions to become conduits for the deepening of democracy and to be venues for agency-shaping and agency-enabling (Offe 1997, p. 27). Undoubtedly a culture of trust, according to Stompka (1997), does activate and mobilise human agency, but for trust to be brokered there needs to be an enabling and nurturing space and the recognition of uneven distribution of power between groups and within groups (Parfitt 2004; Briggs & Sharp 2004; Williams 2004). Parfitt (2004) notes that lessons learnt by research organisations suggest turning the 'top-down procedures, systems and structures' of development bureaucracies into 'learning organisations' wherein people are assisted to enhance their capacities to undertake and participate in development (2004, p. 549).

Filtering effect of the frame

In furthering the understanding of knowledge, power and agency, the way in which selective types of knowledge are perpetuated is pertinent. Schaap and van Twist (1999) illustrate that 'pragmatic civil servants' are used to talking in terms that are different from those of the public who voice their fears about water shortage or 'dirty water' in ways that are considered by the 'pragmatic civil servants' as incomprehensible or unintelligible (1999, p. 72). The responses to many questions are dismissive and uninformative, but Schaap & van Twist (1999) consider this as the 'filtering effect of the frame' that controls the actors' way of perceiving (1999, p. 67). Due to the construction of the frame of reference actors only perceive 'the' facts if,

and in so far as, their own frame allows. The filtering effect of the frame serves as scaffolding to reinforce existing systems and structures and to resist change or threats to their stability. There is tension between DWAF's desire, stated in the position paper on catchment fora, that stakeholders in catchment fora should, according to Hart (2001), be able to perform specific tasks on behalf of the CMA and other water management institutions and the need for these fora to be inclusive. For, given the legacy of apartheid, those who are able to undertake the tasks, as proposed, are likely to be those with technical expertise in the domain of water and whose language fits the filter.

Powell & Dimaggio's (1991) argument is that institutions are rife with conflict, contradiction and ambiguity (1991, p. 28). But very little 'conflict or contradiction' is evident, suggesting that these institutions are restricted sites that will not produce trust. Information sharing is curtailed because of unequal power, knowledge and agency – what Serageldin & Grootaert (2000) refers to as the levels of equity (2000, p. 49). Adequate and accurate information enables people to make appropriate and efficient decisions (Serageldin & Grootaert 2000, p. 48). Power, on the other hand, controls the way in which information is shared and, as Scheff (1990) contends, the unequal access to knowledge is in turn responsible for perpetuating in-group and out-group dynamics. Scheff (1990) notes that 'in modern society, experts usually see laypersons in their own society, that is non-experts, as an out group whose common sense is tantamount to ignorance' (Scheff 1990, p. 142).[3] The theoretical position of Serageldin & Grootaert (2000) and Scheff (1990) is important to consider in the analysis of trust and transformation in the Breede-Overberg alongside that of Powell & Dimaggio (1991), for their emphasis is that unequal access to knowledge renders impotent the conflict, contradiction and ambiguity (1991, p. 28) inherent in the system.[4]

The selected extract 'let's get a move on' demonstrates well how the confrontation between different points of view is avoided based on 'the' facts (*ibid.*) in this case that this is not the venue for this discussion to take place, although, if the frame of

[3] Also see Miller (1993) and Ostrom (1996).
[4] This fits with the theorists Briggs & Sharp (2004), Newman *et al.* (2004), Parfitt (2004) and Williams (2004).

reference were different, it could be. Involvement does not interfere with the 'core business' (Newman *et al.* 2004, p. 215) and the 'let's get a move on' is 'coercive persuasion' (Parfitt 2004, p. 546) fulfilling what Newman *et al.* (2004) present as a rational approach to avoid consultation. Avoiding consultation safeguards having to modify decisions based on the view of what the public might say (Newman *et al.* 2004, p. 210). Too much consultation could inhibit 'moving on' but too little undermines deep changes that are ordained by the law. The concern with efficiency overrides the desire for empowerment and the redressment of unequal power relationships (Parfitt 2004, p. 539).

Localised expert knowledge

Elinor Ostrom (1996) and Margaret Levi (1996) acknowledge that the merging of technical proficiency of state officials and local competences is ideal. Both agree that the sustainability of managerial systems at the local level is jeopardized if local people are not taken seriously and if decision-making is not consultative. The contention is that ordinary water users, although lacking in competence in the 'scientific' generalized language of old water user networks, possess high levels of localized specialist knowledge in water matters. The following extract describing the shortage of water on farm schools in the Matroosberg Area of the WMA is pertinent.

> There is no water at the property. Water is carted from the resort or taken from a canal… closest source is 200 m. And another example: water is obtained from Mr Du Toit. There is one standpipe and a water tank is needed as irrigation activities in the summer leave the school without water. Or at Nuy primary school, the rainwater tank is broken and there is no permanent water supply. Or again, at Glen Heattlie School, there is no water supply. Wysersdrift Primary, no permanent water supply …(Breede River Basin Study 1999).

This extract reflects a keen knowledge of water scarcity within a rural school context in the Breede-Overberg. But the issues of 'ordinary' water users are not discussed, and as a result the water users with these troubles remain silent. The constraints between public officials and ordinary water users inhibit the process of dialogue and engagement in the forums (Newman *et al.* 2004, p. 213). Concerns with the quality of water, weirs and pumps, inlets and outlets, fynbos[5] or whale-watching are high on the agenda, and the ecological reserve, for the first time a consumer in its own right, is

[5] An indigenous vegetation peculiar to the Cape Province.

also eloquently represented. As Ribot & Peluso (2001) note, those who have not only the ability but, importantly, the authority to name things are best able to profit and control the process of water management (2001, p. 13).[6] The more 'mundane' water matters that are impacting on the lives of many water users in their daily lives are not brought into the public sphere and remain invisible. When there isn't water for pupils to wash their hands after using the toilet at the local primary school, the needs to keep the catchment pristine seem indeed trivial.

Bekker & Leilde (2003) in *Exit voice and loyalty in South African towns* note three possible scenarios that face local non-state actors when their needs are not met: they remain loyal (but not committed), they exit from the system (non-attendance, non-participation) or they remain silent. (2003, pp. 158-160). The ordinary water user (and approximately 80% of civil society in the Breede-Overberg WMA forms part of that social segment that was previously excluded – and who are coloured or black) does not have the issues that affect their day to day living considered in the management systems that are being put together today.

> We try and get them to come but it is difficult. They will go to meetings in the township about housing and other things but they won't come here. We have had numerous public participation meetings but it is really difficult. (Interview: Consultant, Overberg WMA, February 2002)

There are several reasons why it is difficult 'to get them to come.' 1) Water users with higher incomes more easily have the time and the money to get to meetings. Grootaert & van Bastelaer (2002) notes that those with higher incomes can devote more resources to network formation and thus acquire more social capital more easily (2002, p. 67). The transaction costs are higher for the poor (Barberton 1998, pp. 245-248). 2) Water is not the most pressing issue. Ranking priorities for the poor, housing, jobs and education have been ranked over and above water (Clark 2003, p. 105).[7] 3) Non-consequence of non participation.

[6] Ribot & Peluso's (2001) argument is that scientific narratives are used to control and profit from natural resources and land use. Access includes much more than merely owning property.

[7] First priority – job, second priority – housing, third priority – education, fourth priority – income, fifth priority – family. The survey was undertaken in Wallacedene (squatter town, Cape Town Metro) and Murraysburg (deep rural Karoo) in March 1998.

Non-participation signifies closedness (Schaap & van Twist 1999). According to Termeer & Koppenjan (1999) confrontation and dissent is only possible when there is social variation as well as cognitive variation – that is people who are from different social configurations as well as people who have different views (1999, p. 85). The intimations of Termeer & Koppenjan (1999) ignore the dimension of knowledge and power which is overriding. There is social and cognitive variation amongst the water users but the dominant discourse and power relationships that play themselves out neutralize these variations.

> They want national puppets not players. (Interview: Onrus Steering Committee, Overberg, September 2001)

The above extract was uttered by a technical expert in the field of water, but an expert who has unusual knowledge and skills in 'both domains' with an experience of cooperation and understanding of poor water users that is apparent in some of the old school public officials. But the 'power' of this expert, who has cognitive – and emotional – dissonance with the water user elites, is undermined and he feels like a 'puppet' not a 'player'. It is at the meeting-point of differences and variations that the dimension of power is critical.

Despite cognitive and social variations, unequal access to knowledge inhibits discussion. Knowledge flows are restricted and it appears that decisions are taken outside of the meetings and that the agendas are preset. Mitchell & Schoeffel's (2002) analysis of Noam Chomsky's critique of power highlights Chomsky's insights into the way in which actors shroud their working in 'mystery' so that the information is 'above the ordinary person' (2002). It is here that the shame theory is pertinent. When ordinary persons/water users seemingly accept decisions that are not clearly explained and are shrouded in mystery, the actor will be unlikely to take the risk of speaking out, for fear of ridicule. Silence or withdrawal are attractive alternatives. In turn, without risk-taking, trust will not be developed and vicious cycles of inclusion and exclusion continue.

Stoep talk breaks bounds of 'acceptable limits'

The above discussion confirms what Ostrom (1996) asserts that the way in which knowledge is produced, used and understood has a political dimension (1996, p. 229). Technological objectivity controls the actions of others, and this objectivity is repetitively reconstructed in social groupings and is manifest in the way in which different water users interact with one another (Loveridge cited in Vroom 2002).[8] Powerful elites are also able to use the existing information that they do have available to strengthen their arguments, and there is very little accurate information to contest biases that might occur (*ibid.*). Lack of information by participants includes low literacy and numeracy, factors that complicate organizational activities and that limit the ability of people to engage in debates. Low literacy levels particularly affect the way in which many ordinary water users are able to participate in discussions about numbers in budgets or financial forecasting. Information is an important source of power and, as the discussion so far suggests, without the necessary information people are unable to organize and act appropriately to protect their interests (Barberton 1998, p. 256). Barberton (1998) lists a number of other practical problems, such as lack of transparency of institutions, which require skill and persistence to overcome, and additional costs in gaining access to information (1998, p. 265), gatekeepers such as consultants or community leaders who keep some out and others in (1998, pp. 266-267), distances, inconvenience of venues and so forth (1998, pp. 246-265).

Mitchell & Schoeffel (2002) discuss Chomsky's understanding of power and note that when debate is bounded 'within certain acceptable limits' it is 'tolerated, and in fact even honored' (2002, p.13). The 'chic engineers' are able to bound the debate within the 'acceptable limits' and they are seen, at least by DWAF, as trustworthy others.[9]

> Chic engineers Ninham Shand consultants are presenting high tech power -point slides. These meetings are for consultants, not for farmers. Why

[8] The same volume refers to what is known in German as the *erkenntnisinteresse* (knowledge interest) that divides the domain of the non-scientific – the average practioner's experience – with that of the scientific. Also see Ribot & Peluso (2001) who refer to individual or group social identity, membership and knowledge as elements of access and influence over authorities and, importantly, the distribution of benefits from things. But this discussion will be pursued in Chapter Three.

[9] The idea of respectability put forward by Ross (1999), Bickford-Smith (1999) or Ross (1999) is pertinent.

don't they stop spending so much money on consultants? (Commercial Farmer BRBS Stakeholder Committee, August 2001)

Within the current domain of water, economistic and technological discourse dominates. The short extract on the 'chic engineers' is an extract of behind the scenes talk that took place on the 'stoep.'[10] When trust is not brokered formally, shared values may be exchanged informally or what Erving Goffman (1959) describes as the 'backstage' where there are 'off-the-record' performances. During the course of water committee meetings important exchanges take place in the corridors, or what Wicomb (1998) describes as 'the ambiguous space between inside and outside, between public and private....'(Wicomb 1998, p. 104). Wicomb (1998) refers to the phenomenon of shame that 'cross-eyed and shy, stalks the post-colonial world broken mirror in hand, reproducing itself in puzzling distortions (Wicomb 1998, p. 92). Although not suggesting that shame can be generalized and that all who do not have the expertise and knowledge feel shame, the 'puzzling distortions' are worth considering as they provide insights into the social configurations that exist on the 'stoep' and in the interstitial spaces around the formal venues. It is possible that people who have status and respectability (Ross 1999; Bickford-Smith 1999) and who are co-opted into public space where they are unable to make meaningful contributions, feel shame.

The interstitial or liminal spaces are understood well by Turner (1974) who uses the term to describe ritual where 'those being moved in accordance with a cultural script were liberated from normative demands ... and were betwixt and between...' (1994, p. 13). As water users move into the 'bewixt or between' 'stoeps' the 'prestigious programme' (1994, p. 14) of DWAF can be revisited. These are significant spaces as the formal meetings are crowded with information and, often because the meetings start late, are interrupted before the agendas are fully complete. Knowledge is circulated in backstage ways outside what Thompson (2001) refers to as the centred spaces of male power. Significant knowledge, experience and strategic insight about the problems and strategic needs of local water users do exist, but the ways of exploring confound the rational scientific paradigm that is all-pervasive. Discussions continue in the informal spaces but unequal access to knowledge determines the in-group and out-group dynamics (Scheff 1990; Serageldin & Grootaert 2000, p. 49).

[10] Wicomb refers to the '*stoep*', an Afrikaans word for veranda, the terrace space outside the house.

Interpersonal trust is far more difficult to build across different groups of people than between people in the same groups.

Impenetrability of the 'real' world out there!

It is possible that shifting the 'science' from technological infrastructure and water discourse to people discourse would help reconfigure social regroupings and render intergroup exchanges more probable. Andrews & Shah (2001) note that unresponsive, centralised bureaucrats do not manage change easily and are, as Parfitt (2004) suggests, also resistant to it. As a consequence bureaucrats and public officials resort to top-down interventionist mechanisms that are counterproductive for trust. Very many of them lack the skills required to drive a 'people-centred' process and are unable to introduce new mechanisms for integrated water resource management that are pro-poor. As the developing of the CMA is seen largely as a technical process (Wester *et al.* 2003, p. 808), the 'rational-choice' paradigm of 'scientific knowledge' and pipes and pipelines of the bureaucrat is juxtaposed to what Thompson refers to as the 'objective reality' or 'science of people' (2000, p. 233). Thompson writes:

> 'silence of the peasant farmers, the laborer, the houseworker, the mineworker, the truck driver and the informal urban dweller on environmental issues does not of course imply a lack of knowledge. Nor does it imply a lack of concern' (*ibid.*).

The notion of hard knowledge implies a rootedness in the real world out there as well as a masculine normative vision of immutability and impenetrability which is seen to be simply not possible in the 'soft social' sciences (Thompson 2000, p. 233). The danger of adopting this position is that unnecessary resources are dispensed in order to 'skill up' the public and to develop training manuals or mini courses on a variety of topics. But, as Newman *et al.* (2004) warn, this approach simply reinforces the standards that are being set by bureaucrats and 'technical' experts, or what Thompson (2000) refers to as the masculine normative vision of immutability and impenetrability rather than enabling bureaucrats to be skilled up to learn about what participants are bringing to the process (Newman *et al.* 2004, p. 212). Newman *et al.*'s argument is that the culture of public services requires change and that the frustrations that are felt when local concerns are not met would be mitigated if there was less government and more governance (2004, p. 206). Newman *et al.* (2004)

make the bold proposition that lay people be brought into public institutions and that a more collaborative form of governance, rather than government, would be conducive to the building of trust between domains.

Reinforcing patterns of inclusion and exclusion

Cloete & Wissink (2000) identify reasons for policy failure, one of which is bad implementation. The authors list a number of reasons for 'bad implementation' such as lack of sufficient human resources or lack of financial resources, but in particular 'defective management processes or organisational cultures' (*ibid.*). Information overload, preset agendas and exclusive dominant knowledge regimes are symptoms of a style of government that is top-down and makes synergy between actors difficult, reinforcing closed networks and historical patterns of inclusion and exclusion. The model, one which is, as Thompson (2003) states, typically rational-choice with an emphasis on management (2000, p. 233), with the implications being control from above, is rigid and it reduces a willingness to attempt change (Hardin 1993 in Levi 1996, p. 243).

The decisions that are taken, whether or not they reform and improve access to water for those who do not have it, are made with or without the voice of the water users. Actors are prepared to change their go-it-alone strategies (Ostrom, in Kickert & Koppenjan 1999, pp. 40-41) when they see that cooperation is to their advantage. But when the transaction costs of participating are higher than the benefits and their social interests are inadequately serviced (Kickert & Koppenjan 1999, p. 42), the incentive to participate is amputated. The real consequences of non-participation are marginal (Granovetter 1985; Woolcock 1998), and this has dire repercussions for participatory development. If the consequences of non-participation are marginal are the efforts that are spent driving participation worthwhile? (Williams 2004, p. 565).

The two short narratives that follow are set in similar geographical settings but with starkly contrasted social landscapes. The first is a narrative of commercial farmers in the Ruensveld and Duivenhoks region of the Overberg WMA and the second is a narrative of the fishing village of Kassiesbaai in the Overberg WMA. The first story is about building social networks in the Ruensveld and Duivenhoks area of the Overberg between commercial farmers and government and the second is about closed

networks and lack of social capital between the residents of Kassiesbaai and government.

Ali Baba and the Forty Thieves

In the late 1940s the Soil Conservation Act (No 48 of 1946) brought together farmers who gave of their most precious resource, time, in meetings where they discussed soil conservation. Closely related to soil conservation were issues such as grazing, crop growing and, with these, water. Later on farmers' wives, driven by a common experience and frustration, came together and became drivers for change. The following extract is pertinent:

> All water for house and stock was dependent on good rains .... A cartload of water cost R18... adults can manage a water shortage. The animals just have to get by. But it is when the babies arrive that the nuisance is experienced more acutely. Drinking water from the village used to stand in our kitchen in six large milk cans... One morning there was a terrible smell of putrid water in the kitchen. The water in the milk cans! I was fed-up, discontented and angry, and was on the warpath (Wilson 1999, p. 27).

During the apartheid period, white farmers had established their own in-group social networks based on a common interest in improving water management, and the common need for drinking water motivated some farmers[11] to activate the networks and to lobby the government of the day. Three farmers' wives from the Duivenshoks farming area in the Overberg went to Pretoria and presented their case to the Minister of Water Affairs. As a result of negotiations between government and farmers eight months later, a water project was announced that was to bring water to 540 000 hectares (Wilson 1999).

> 'Today there is a 1 400 km network for farmers at present; if that network of pipes had to be laid today it would cost between R250-R300 million.' (Interview Overberg Water Board, May 2002).

However, notions of belonging remained contested and as other rural water schemes were being developed costs were revisited and commitment to the scheme by commercial white agriculturists was less secure. The Heidelberg Farmers' Association

[11] The heterogeneity of farmers is not forgotten.

water users in the area, and these networks created patterns of cooperation and built generalised trust and formed a safety net for elite experts (Kickert 1999).

Significantly, the network linkages affirmed that there could be gainful economic – and social – production through individual and collective efforts (Knack & Keefer 1997; Rose 2000; Grootaert & van Bastelaer 2002; Putnam 2000). The financial gains were substantial but so too was the production of social stock that included feelings of pride and honour (Woolcock 1998; Lynd 1958).

It also provided sufficient face-to-face relationships where a reputation 'for keeping promises is an important asset' (Ostrom 1996, p. 214). Knowing that individuals share a commitment to keep the promises made to a group – so long as others keep their promises – affects individual expectations about future behaviour and is a 'prerequisite for organizing association to undertake major, long-term collective action' (Auman, in Ostrom 1996, p. 214). The pride, honour and sense of achievement resonate in the passage below:

> Despite the problems encountered, the completion of the scheme brought major satisfaction. It was highly gratifying to see years of planning, design and construction coming to fruition – to see raw water being extracted from the river, undergoing the purification process…(Wilson 1999, p.11).

There were 'virtuous' cycles of reciprocity established and there was no need to break these.[12] Their farm labourers, and any other marginalised water users, were not consulted when decisions were made about water. Nor were they provided with training or skills development regarding water resource management. They were involved in the water schemes, but as manual labourers who dug trenches for the reticulation networks (Wilson 1999). It was because of these existing state-society networks and established relationships of cooperation and reciprocity that commercial farmers were the first to be approached by government in the early years after democratization to participate in their new schemes and to contribute to water planning and management.

[12] Virtuous for some but of course vicious for others who were excluded from the benefits of the scheme.

in 1979 appealed to farmers to remain united and their scheme was agreed to with revised costs for 198 000 hectares (Wilson 1999).

Government understood that it was in the economic interests of the country to provide farmers with access to water, and through negotiations the economic consequences of water scarcity were highlighted. Small stock units could be increased from 2.11 per hectare to 2.87 with water schemes and the positive net income for farming was of national interest. In stark contrast, the provision of water to black farm labourers was never considered a priority (Wilson 1999).

Commercial farmers in the Overberg became wise to the workings of government and to water matters. They gained self-confidence and competence and the networks gave them what Cohen & Rogers (1992) call 'educative powers' (1992, p. 424). They knew exactly how much water was needed for their stock, where the water came from, what the problems were relating to water (salinity, instream flows, flooding, drought) and how to work with government specialists in managing these problems. Importantly, white agriculturists learnt how government bureaucracy worked, and by activating their social resources they were able to manoeuvre through the corridors and to galvanize nodes of power within government where decisions were being made (Gran 2001).

The value of these farmers' land was so intimately linked to their ownership of water that any issues relating to their economic wellbeing and land production were included in the policy discourse concerning water resource management. Exclusive networks were built between farmers in the Overberg long before the collapse of apartheid and credit slips (Coleman 1988; Warren 2001) were accumulated that would serve the water users forty years later.

The Duivenhoks and Ruensveld rural water schemes were built in the Overberg and the construction of the schemes demonstrated how cooperative relationships between neighbours contributed to sustainable water management systems for white farmers. The schemes improved access to scarce resources and secured sustainable livelihoods. The success of the schemes depended on the connectedness between segments of

The white agriculturists took a risk, but in the process considerably widened the potential for action (Luhmann 1995, p. 128). The present action of the farmers' wives was premised on the expectation of a future favourable response – the implementation of the scheme (Offe 1997, p.14). The present action of the government of the day was most likely premised on the expectation of a future favourable response at the polls.

Molenaers's (2003) argument of the attraction of network closedness is pertinent for it is understandable that trustworthiness of the existing farmer network was a valuable resource and that it reinforced shared obligations and expectations. (Molenaers 2003, p. 122). Resistance to open up these networks to newcomers, of a different background, is also resistance to 'lose' the trustworthiness that has been consolidated between network members (Molenaers 2003). These farmers who interacted over long periods of time created rules that regulate their behaviour today and influence their strategic options (Klijn 1999, p. 33).

Muddied waters for Kassiesbaai

In stark contrast to the networks that were established in the Overberg between white farmers and government, Kassiesbaai, a small coloured fishing village, less than 100 kilometres away, in the adjacent area of the same catchment, is poor in water and poor in social resources to manage the water (Turton 2002). Trust is low between government officials and water users and here there has been no history of cooperation between government and water consumers. It is likely that Kassiesbaai's water supply will be improved in the near future, but the decisions that are being taken in Kassiesbaai today are taking place between 'knowledgeable' elites who are members of the ratepayers association, the conservation corporation, the municipality and technical 'experts'. There is only one representative from Kassiesbaai village on the ratepayers association as most of the erven in Arniston as a whole are owned by holidaymakers. There are approximately 200 households in Kassiesbaai. Decisions are not taken in consultation with the residents of the village and trust between water users in Arniston and the water users of Kassiesbaai is low. Trust between the residents of Kassiesbaai and the Agulhas Municipality, under whose jurisdiction they fall, is tenuous. One of the residents, an elected councillor involved for some time in negotiations for water on behalf of the community with the local municipality, reports:

> I have been talking to the municipality for years but I still don't understand anything about water. Oh, water is such a difficult thing. I don't know where the water comes from or what is going on but only that it doesn't taste good and that this has been like that for centuries (Interview: Kassiesbaai Councillor, Arniston, February 2004).

Because local government is the sphere of government 'closest to the people' theoretically, according to Fick (2001, p. 43), councillors have the opportunity to engage with and respond to their constituencies in relatively small areas. But in the case of small towns such as Kassiesbaai the councillors have neither the knowledge – nor the authority – to promote and protect the interests of the town.

The relationship between scarcity of water and scarcity of social ingenuity to resolve the Kassiesbaai water problem is stark. Despite the reversal of the regime the problems of organization and of distribution of information and negotiation of powers, for those who were not part of water policy networks during the apartheid years, are deep-rooted. Water consumers in Kassiesbaai suffer water resource deprivation and social resource deprivation. [13]

Old networks are not easily unstuck. The deepening of democracy and the building of trust between water users depends on equality in knowledge and wealth (Farrington *et al.* 1999; Ravaillon 2001). Without a real understanding of the principles of integrated water resource management and the water cycle, and a radical change in the way in which government officials interact with local water users, networks will remain exclusive rather than inclusive and trust between different segments of water users remote.

Making cracks in exclusive networks of trust

It is through shared meanings and experience that, over time, thick trust and social capital was established amongst white farmers and bureaucrats responsible for water

[13] Arniston received 65% of its requirements from the Ruensveld East schemes and to a lesser extent Bredasdorp where about 27% of the town's current water requirements are supplied from the recently built Klein Sanddrif Dam. The remainder of water supply to Arniston and Bredasdorp is from boreholes delivering groundwater of varying quality. During peak periods, Arniston also receives water from Denel. The water from local boreholes is extremely brackish. Source: Proposal for the Establishment of the Breede-Overberg Catchment Management Agency, July 2003.

management. The competing 'pockets' of social capital that were formed during the apartheid years shape the way in which stakeholders operate today and entrench feelings of distrust between segments of water users. On the one hand, the social capital of the white agriculturists and water experts that produced the Duivenhoks and Ruensveld rural water schemes, and on the other, the contrasting context of the everyday experience of water users in black townships, such as Kassiesbaai. Water users in such towns have developed deep distrust for government officials that it is, as Termeer & Koppenjan (1999) state, part of the social configuration that is so embedded (1999, p. 83) that it will take years to eradicate.

Black farm labourers, who were not owners of land, developed their networks and trust amongst themselves out of long-term grievances and a shared sense of marginalization from these embedded water networks. These different kinds of trust relationships were more tenuous as the networks of political activists that were formed were constantly undermined by the police and apartheid authorities who were eager to use any occasion to smash allegiances that threatened their regime (Ruiters 1998, Marais 2001). The police created cracks wherever possible through gossip, slander and undermining the social capital that was being constructed. Under this climate of rule and divide, trust was difficult to build and unlikely to be sustained.

The relationship between trust and risk (Seligman 1997; Warren 1999; Levi 1996; Luhmann 1995; Offe 1999; Giddens 1990) is particularly relevant in the context of water management that is currently dominated by uncertainty and changes. Contrary to the theorists who claim that exaggerated uncertainty is part of the reason that people take risks, in the water sector people are unwilling to take a risk. It is unlikely that new social capital will be produced because closedness or social fixation of a formal or informal, conscious or unconscious, nature intrudes with the way in which people connect (Schaap & van Twist 1999, p. 64). Levi (1996) also notes the way in which network closedness restricts innovation and inhibits the construction of new social capital. The obvious attraction of the closedness was referred to in the earlier theoretical discussion where Molenaers (2003) observed the propensity of closed networks to retain trustworthy members (2003, p. 122). The likelihood of white agriculturists admitting coloured small-scale farmers into their water policy networks is remote.

As the provision of water (and other services) to the majority of South Africans was not a priority it is unsurprising that ten years into democracy it is difficult to co-opt water users into networks from which they have been excluded and with which they have no history of trust or common meaning. The elected councillor of Kassiesbaai has no voice in decision-making institutions because he does not have the 'scientific' knowledge or *erkenntnisinteresse* (Vroom 2002). Eade's (1997) links between knowledge and self-esteem (1997, p.11) proclaim the compelling desire to avoid embarrassment by showing ignorance through being poor and uneducated (Desai 1994, p. 227). This negative chain reaction is not transitory and, as Heller (1985) and Scheff (1990) warned, reverberates within larger systems and institutions as knowledge includes those who have it and excludes those who do not.

Granovetter's (1985) argument that it is through linkages in social and political networks that people gain access to new sources of information, avoid inefficient information redundancies and facilitate information flows to wider social circles, is more than evident from the short narratives presented above. Information empowered the commercial farmer group to demand transparency and accountability of government officials and to actively participate in decisions that would have a lasting effect on their social and economic wellbeing. The farmers lobbying for water schemes in the Duivenhoks and Ruensveld gained new sources of information and years later are better able to avoid information redundancies. At the other extreme, the water users of Kassiesbaai have not engaged with 'trustworthy others' in the past and have not experienced agency-enabling exchanges with public officials.

The principles of democracy are merely advertised and displayed as 'nice to have', but for these principles to be displaced from the window to the floor the connection between knowledge, power and agency would need to be examined. Although Agrawal & Gibson (1999) are correct to say that institutions can change with 'constant challenges to their form by the actions of individuals whose behaviour they are supposed to influence' (1999, p. 637), their assumption is that there is an equalizing of power so that the members are able to influence the outcomes.

As the state is seen by the majority of South Africans as the protector of rights and carries the burden of delivery to the poor, is it necessary for poor people themselves to be drivers of development? Is it possible that non-participation is a manifestation of high trust in the elected African National Congress? The overwhelming dominance of white agriculturists in the fora is likely to be a manifestation of distrust for the regime and a determination to control their own futures in the water sector because they can no longer trust government to do this on their behalf. An unintended consequence of participation is that the patterns of the past are not only reproduced but reinforced. In other words, because there is, as Halvorsen (2001) notes, trust in the system, being there in person is less critical in order to ensure the right to water. White agriculture is at risk and there is little chance that commercial farmers will leave this up to trust as there is too much to lose. In their case it is likely that the anticipated benefit of attending meetings far outweighs the cost.

However, the venues provide empirical evidence for Mishler's (1997) bad and good cholesterol theory and for the vicious or virtuous cycles identified by Putnam (2000) and others (Ingelhart 1999; Krishna 2002). Those who have meaningful interchanges today are those who have already attained trust in the past and who have the language and the knowledge to engage with authorities, for in the new spaces they are, as Termeer & Koppenjan (1999) write, nonetheless 'embedded in familiar exchanges' (1999, pp. 83-84), endowed with similar views and interests. The distinction between systems trust and people trust is an important one to note and is one that is underemphasised in the trust discourse. Those who have trust today have given their trust to 'trustworthy' others (Hardin 1999), that is the provincial state officials and consultants who are protecting their interests, but not to the politics of the ANC government.

Honour, shame and trust

Although predominantly white and male, there are cognitive and social variations between water users, and yet decisions are unanimously passed (Desai 1994, p. 227). Differences are muted because water users who do not form part of the dominant knowledge regime that permeates the venues fear embarrassment or being considered 'incomprehensible or unintelligible' (Schaap & van Twist 1999, pp. 84-85). The

opportunity to exchange information is lost and the opportunity to build trust between actors is also restrained.

The exclusion of new actors – and the ideas that go with them – reduces variation (Schaap & van Twist 1999, pp. 84-85) and inhibits information flows between people with different views. So far, the discussion has focused on the obstacle to effective participation that is lack of information by the poor. But lack of information takes two forms (Barberton 1998, pp. 249-255). The first is lack of information **by** poor people but the second is lack of information **of** poor people. It is for this reason that Parfitt (2004) recognizes the need for a 'new type of development organisation' that 'turns top-down development bureaucracies into learning organizations' (2004, p. 549). Lack of accurate information of poor people becomes an inhibitor, for when accurate information is brought to the attention of the meeting there is no accepted frame of reference and the information is either contested or considered soft or invalid (Barberton 1998, pp. 249-250). The following extract reflects the practical application of theory, narrowing the gap between the realm of ideas and the usefulness of these ideas in understanding reality:

> I say nothing – I have nothing to say but it is high time that they have asked me to be there so I can learn. No I am not ashamed but I will not speak as I cannot. Shame is about being hungry. I know shame, when I am inside the committee I will just say yes until I learn and they will not know how poor or ignorant I am. It is a terrible thing when you feel hollow inside. Hunger can make you feel this and not knowing anything can make you feel this.' (Interview small-scale farmer, Central Breede Water User Association, Robertson, November 2001)

Barberton (1998) notes that the process of empowering people involves changing their perceptions about themselves as well as about other people so that they are able to claim their right to equal treatment irrespective of their social or economic status (1998, p. 267). Positive social action enhances autonomy and freedom, introducing what Scheff (1990) referred to as *gleichaltung* (1990, p. 76), which is not an abstract idea but a feeling of wellbeing that is a practical enabler of meaningful exchanges. *Gleichaltung* (1990) was expressed well in the feeling that the Ruensveld and Duivenshok rural water schemes brought to the agriculturists as 'the scheme brought major satisfaction. It was highly gratifying to see years of planning, design and

construction coming to fruition'. Quite the opposite happens when social interaction results in embarrassment, criticism and insult, and one of the outcomes is the production of shame.

The extract above reflects what Wicomb (1998) has called 'puzzling distortions' of shame and the way that shame 'stifles its own discourse' (1998, p. 92). The text reflects these distortions – 'no I am not ashamed' and 'yes that I feel hollow inside, hunger can make you feel this and not knowing anything can make you feel this.'

Schizoid transformation process

The deep social cleavages of the past are apparent in the way in which water users engage with one another reinforcing cleavages rather than creating bonds and building trust amongst each other. Attempts to bridge the social cleavages are flawed.

> People don't really take time to involve people properly. It takes time to get people together and for them to give input. The distances are great and people are very busy now with the transformation. I have to report back but I don't even know what I am supposed to say. And all the decisions have already been made. I don't feel OK to put up my hand and say anything because there are all kinds of other things being said like volumes of water and the environment and I don't know about these things. I just know that the people in my constituency don't have good water supplies. (Councillor, CMA Reference Group, October 2001, Worcester)

In principle democratically elected and accountable local councillors are supposed to be able to act as channels and make demands on behalf of their constituents (Desai 1994, p. 235, Hart 2002, p. 235), but as they are unable to intervene on behalf of the people they represent and because they are unable to transfer knowledge which they have not yet accumulated, their role is undermined. Hart (2002) describes this status of local councillors as 'perched precariously on seismic fault lines' (2002, p. 235). [14]

Councillors are expected to placate white privileges but at the same time they are confronted with urgent demands for material improvements for the residents whom they represent and who see them as 'trustworthy' because they have their

[14] Hart (2002) notes too that the newly elected ANC councillors were also given an opportunity very quickly to see themselves as employers and managers and that in some cases their efforts at reconstructing a more racially diverse bureaucracy were partly successful (2002, p. 245).

'encapsulated' interests at heart (Hardin 1992, p. 505). Desai (1994) describes how poor slum dwellers are reportedly 'just poor and uneducated' (1994, p. 227) and that they cannot understand the issues involved. Councillors are not 'just poor and uneducated' but they are poor in the resources to manage water and not proficient in 'scientific' language. The correlation between poverty in the first-level resource (water) and poverty in the second-level resource (the ability to manage it) is apparent (Turton 2002, 2003), but it is critically important not to introduce second-level resources as an add-on. Councillors are supposed to understand what is being discussed and their 'community' assumes that their network linkages provide them with the opportunities to wield power (Desai 1994, p. 228). Yet the power invested in them is thin and they are unable to impact on the construction of water policy networks. The member co-opted onto such a committee experiences both honour (as an elected or nominated member) and shame (as an unequal partner who cannot negotiate) in a schizoid transformation process. Tension between retention of power as a leader and powerlessness as a committee member is real, and the member is given a voice to attend but is unable to be vocal. Epstein (1984) contends that people will avoid embarrassment or occasions where inadequacies might be revealed (1984, p. 33). An individual is also likely to be too reticent to lose 'respectability' (Ross 1999; Bickford-Smith 1999) by confronting values that belong to a world that is considered to be superior or desirable, and thus the legitimacy, or lack of legitimacy of the procedure is uncontested.[15] According to Vincent (2004), in the quest for respectability and acceptance by the authority it is worthwhile 'capitulating to the dominant status quo (2004, p. 112).

Pattison notes that 'the creation of strong authority is understandable but dysfunctional and alienating' (Pattison 2000, p. 139), and shame has been noted as a 'perception of unacceptable inferiority produced by a sense of dependence on one's employers or superiors....' (*ibid.*). Not feeling 'OK' to put up one's hand for fear of ridicule is a feeling of 'unacceptable inferiority' and it undermines trust. According to Hardin (1993), this type of experience is a determinant in the 'psychology of trust' (Hardin 1993, p. 508). People will do anything to avoid embarrassment, as portrayed

[15] These findings have been confirmed by the author in various case studies conducted for the water sector case study commissioned by Impulelelo Innovation Trust between January 2004 and May 2004. The same findings were also relevant in previous fieldwork undertaken for a similar sanitation and water study during the period June 2003-August 2003.

in the extreme cases by the acts of Boaz in Philips's (1986) *Story of Ruth* or by Epstein's (1984) ToKutu, in *The experience of shame in Melanesia* discussed in Chapter Three. Although less extreme than the Boaz or ToKutu examples, the outcome is that trust opportunities are lost and networks remain fixated. The encapsulated interests (Hardin 1992, p. 505) of the disenfranchised are not being met. The extract above indicates low levels of risk-taking because people do not want to be even more vulnerable (Hosmer 1995, p. 383) than they are to the actions of another person who might make them feel 'stupid' or a 'fool' (Heller 1985, p. 48) or 'have one's inadequacies .... uncovered' (Epstein 1983, p. 33). Empirical evidence suggests strongly that those who do not have the language and knowledge remain silent in order to avoid being embarrassed or shamed. Seligman's (2000) argument is that the modern self has full agency and is able to participate. As a result exchange – either symbolic or material – is possible, and part of the symbolic exchange is the 'trust' produced as a credit (Seligman 2000, p. 44). For Seligman, this exchange is based on what he refers to as a rational actor model of self (Seligman 2000, p. 80). But not unlike trust, the attitudinal component of social capital, shame, is rational – the actor chooses to trust or not to trust and empirical evidence suggests that the water user chooses not to be put to shame or be embarrassed and to rather exit or withdraw. This confirms what Scheff (1990) contends, that shame – silence or withdrawal – is therefore not only an emotional response but also a cognitive one.

Summative remarks

Distrust is deeply embedded in the historical memory of the majority of citizens of South Africa who have been subordinated to a strong authority. Many of the forums and committees are governed by water users with entrenched habits, practices and networks whose focus on infrastructure capital has not been replaced by a focus on social assets and, more importantly, by a focus on ways of negotiating and engaging with one another that are different. As this is the case, these forums repetitively render voiceless the claims of many water users and intensify the interests of others (Warren 2001). White commercial farmers and elites who formed part of old water policy networks have learnt to cooperate and have developed relationships of reciprocity and trust between themselves and between government. But is the relationship between familiarity and trust so clear? Are the established networks between government and white agriculturists and between agriculturists themselves relationships of trust or of

familiarity? The trust is more likely to be in the trustworthy (or familiar) other rather than the system put forward by the elected government. The distinction between familiarity and trust is precarious. But, importantly, although there are conflicts, tensions and dissent amongst these groups, over new issues such as licensing and catchment management levies in particular as well as between themselves, these farmers know where and how to proceed with their grievances and they possess the 'scientific' language to present these grievances to government officials.

Information empowers citizens to demand transparency and accountability of both public and private institutions and to participate in decisions that affect their everyday lives (Minogue 1998; Wester *et al.* 2003, p. 810). But as the realm of the old and the new meet, exchanges are inhibited and public officials struggle to keep out public claims and noise that might influence their own business (Newman *et al.* 2004).

The farmers lobbying for water schemes in the Duivenhoks and Ruensveld gained new sources of information and are better able to avoid information redundancies today. At the other extreme, the water users in Kassiesbaai do not have social and political network contributors that are agency-enabling. Cooperation around funerals, religious or sports events resonates more loudly than cooperation around water matters. Knowledge which flows across domains is limited, as is social capital to manage water for those who are most in need of the resource. Disconcertingly, the idea presented by Stiglitz (2000) that there is an undersupply of social capital exactly when that resource is most needed (2000, p. 60) is far too real.

If governments are sincere about their commitment to the principles of democracy, there needs to be a better understanding of how the features of knowledge, power and agency go together. The absence of knowledge, the unequal power relationships between water users and the inhibition of agency inhibit the production of trust and activate feelings of shame. Fergusson's (2004) engagement with discourses of exclusion is relevant because it acknowledges the constraints of social and economic structures that retain and reconstruct dominant power relations (2004, p. 291). In order to break the vicious cycles of marginalization or discrimination (Levi 1996, p.

48) the commitment requires a style of government that is, as Sztompka (1997) proposes, nurturing and enabling so as to lay the basis for generalized trust (Levi 1996). But it requires a change in the way in which bureaucrats see development so that water management institutions become places where water users manage water jointly rather than places where water users are managed to ensure that there is the least possible threat to the authority.

Although black water consumers, who were not part of the specialist bodies during the apartheid years, are not currently water experts, over time, according to policy, it is expected that they will become, as Miller (1993) proposes, part of the regulatory process. Whatever influences might come from below, the role of the state (Evans *et al.*1985) in opening up water policy networks and redressing issues of knowledge, power and agency is critical.

Conclusion

The core analytic challenge posed at the beginning of the study is to test the applicability and relevance of theoretical assumptions about trust in explaining transformation in the water sector. The study has connected to the lived experience of water users in the Breede-Overberg Water Management Area (WMA) and unveiled a certain, but not the only, reality and in so doing has presented certain, but not all, lived experiences in the WMA. Conditions that prevent trust are explored, one of which is the prevalence of shame, under certain circumstances, an inhibitor of trust. It is within the boundaries of the particular WMA, and within the boundaries of the lived experience of the researcher, that the following assumptions are confirmed: trust is a relevant theoretical construct and shame is useful in explaining reasons for the inhibition of, under certain conditions, the production of trust.

But the question is not only whether but in what way trust influences or inhibits transformation and whether and in what ways trust could be used as a measure of reform. In engaging with this empirical work in South Africa, themes latent in the literature were striking, and it became more and more evident that if trust were to be at all useful it would require a robust analytic toolkit deploying an expanded set of key themes that would serve to further the investigation. In this process, six recurring themes emerged: 1) style of government, 2) synergy between state and non-state actors, 3) bureaucrats and change, 4) knowledge, 5) agency and 6) power. It was these themes that guided and informed the investigation into trust within the particular context of water management systems in the Breede-Overberg WMA and showed how the changing role of the state in delivering water to its consumers, affects trust.

The concluding remarks presented in this chapter consider in what ways theory guided and enlightened the observations, and how the observations advanced an understanding of trust in the context of a changing environment in general, and in particular in the water sector.

Overview

Despite global shifts from top-down to bottom-up water management, from an ethos that is supply-driven to one that is demand-driven, damming strategies and centralised

top-down planning appear resistant to change, and the prescribed reform that is critical in order to redress the inequalities of the past is slow to root.

Water policy under the 1956 Water Act actively discouraged participation and water was managed centrally. Under the riparian laws of the old Water Act, property rights to water were linked to property rights to land. Private water rights are now abolished and the emphasis is on water as a national asset underpinned by the Department of Water Affairs and Forestry's (DWAF), slogan 'some for all …' rather than all for some. The principles enshrined in the National Water Act (no 36 of 1998) are designed in line with international sustainable development goals that actively encourage participation of a wide range of stakeholders who operate closest to the resources that are being used. This entails what Newman *et al.* (2004) propose as a shift in the modern state from governing through direct controls to governance where the state interacts with a wide range of interest groups.

DWAF itself recognised, at the launch of the first Catchment Management Agency (CMA), the Inkomati CMA, in Nelspruit, March 2004, that it is not doing enough to change social configurations that have emerged in the past and that are reproduced in the present. Those with knowledge, agency and power are the same water users who had knowledge, agency and power in matters concerning water access and consumption during the apartheid regime. It is the absence of knowledge, the unequal power relationship between water users and the inhibition of agency that makes participation so difficult and keeps those who have knowledge in and those who do not have knowledge, out, with the unintended consequence of strengthening bonds between those who have had, in the past, privileged access to water. If institutions are supposed to be, as Powell & Dimaggio (1991) and North (1990) argue, sites where trust is manufactured, then they are failing in their goals in the Breede-Overberg WMA. Thick trust has been developed between small pockets of water user experts and government officials. Knowledge transfers are effectively undertaken, power equalized, a climate that is agency-enabling flourishes and there are synergistic relationships between state and non-state actors amongst this small group of consumers who were actively involved in water matters under the previous regime. These water users see each other as trustworthy. However, as the empirical evidence reflected, generalized trust, across sectors and between most of the water users, is

absent. In the absence of trust, there is either uneasy trust, distrust, withdrawal or, in some cases, shame. Causal linkages can be made between these attitudinal or behavioural constructs and an interventionist style of government, lack of synergy between state and non-state actors, bureaucrats' resistance to change, unequal power relations, restriction of agency and lack of meaningful transfer of knowledge.

Although policy seemingly embraces a new water management paradigm, the old is being resurrected with all the contradictions and contortions that precipitated the shift in focus from the old to the new in the first place. Repeated failures to achieve reform are costly in terms of finance, and they are costly because they affect the production of trust. The movement of the African National Congress away from the Reconstruction and Development Programme (RDP) to the neo-liberal macro-economic Growth and Redistribution (GEAR) policy, makes it more difficult for government to retain the 'spirit of the law'. The ideology of discrimination where minority groups in the social landscapes of water occupy an undesirable no man's land in the water management systems continues.

Reflection, innovation, uncertainty, polyphony – necessary ingredients when an old system is to be replaced by a new – is a scientific project, not just a fuzzy ideal that is part of 'soft' sciences. As Seale (2004) points outs, even the father of rationality, Karl Popper with his focus on rational science, admits that the field of science relies on refuting, reconstructing experiments, creating alternatives, counter-producing and in the interest of science, making assumptions to test the validity of the hypothesis. The conclusion examines ways in which the CMA pursues the 'scientific' project in order to achieve reform in the water sector. At the same time it examines ways in which the 'scientific' project on the one hand undermines the achievement of reform in the water sector, but on the other has reconstructed the ideas and reproduced new ones that differ from those put forward in the first place. As the study is tasked with testing the applicability and relevance of theoretical assumptions about trust and considering the usefulness of shame as an inhibitor to the building of trust, the pursuit of the 'scientific' project, in other words the way in which refuting, reconstructing, creating alternatives or counter-producing interventions, influence trust or shame, is pivotal.

Despite the new laws and the call for change and reform, the old has not yet been displaced and sits uncomfortably alongside the new. Those who suffer water deprivation have not been able to use their franchise to improve their access to water and their access to decision-making bodies in the water sector. Newman *et al.*'s (2004) concern is that change will not take place unless those that are implementing it are convinced of the significance of the change. As the discussion below suggests, there is on the one hand an undeveloped notion of what participation should entail, but there is also a culture in the domain of water that negotiates meanings around 'scientific' definitions of 'fact' and that reproduces itself in order to maintain control. This culture is not yet convinced that there needs to be significant change in the 'way things are done around here'. Although the principles that emerged from the Water Law Review Process in 1996 informed the behaviour of government and its supporters who are driving the progressive implementation of policy imperatives today, the implementation of the principles, later enshrined in the National Water Act (no 36 of 1998), undermine opportunities for the proposed changes to take affect. The discussion that is followed in Chapter Four and Chapter Five suggests that the restricted opportunities are not only due to lack of substance and clarity around what participatory processes entail but they are also due to a lack of desire to clarify meanings lest this process undermines current relations of power.

Developing a scaffolding for trust analysis

The most helpful theoretical insights that were deployed to unpack the empirical data and develop the relationship between ideas as put forward by theorists and facts as presented by the empirical data were first examined in Chapter Four of the study. As transformation has everything to do with policies that were embraced by the ANC government and embodied in the Water Services Act (no 108 of 1997) and the National Water Act (no 36 of 1998), the role of the state in the production of trust is critical. The deployment of the themes 1) style of government, 2) synergy between state and non-state actors and 3) bureaucrats and their resistance to change, were helpful in scrutinising the role of the state and the influence that changing state policy and intervention has in developing or hindering the production of trust and the perpetuation or production of shame. The central theoretical question posed in Chapter Four, whether and in what ways governments are able to produce trust, cannot be answered neatly. In so doing, the research itself would become part of the

narrow and unscientific rather than 'scientific' project that is explorative in nature, that considers 'facts' from all angles and allows for uncertainty, polyphony and indecision. The most helpful insights gained in this inquiry were gathered from the work of Lowndes (2003), Cameron (2003), Mutahaba *et al.* (1993), Oluwu & Wunsch (2004) and Tapscott (2001) who penetrate, from different angles, the problematic elements of decentralisation that are by no means unique to the water sector, nor, as the work of Oluwu & Wunsch (2004), Lowndes (2003) and Mutahaba *et al.* (1993) reflect, are they unique to South Africa.

Despite policy emphasis on local service delivery, for a number of reasons the state has maintained strong central powers while relinquishing managerial responsibility for delivery of water and integrated resource management, and this is one of the reasons that the social landscape of water reflects low trust between different spheres of government and between government and 'ordinary' water users. Trust at the lowest sphere of government, is particularly thin for it is at this level that the undersupply of resources, human, financial and social capital hits hardest. Implementation of water policy is affected by these restraints. And it is at this level that those who are supposed to be agents of change have very little agency. It is at this level too that, as Tapscott (2001) and Cameron (2003) note, public officials have the hardest time bridging the divide between politics and service delivery and where the paradox between local responsibility to deliver and the command and control impulses of government is felt. Oluwu & Wunsch (2004), Lowndes (2003), Mutuhaba *et al.* (1993) and Tapscott (2001) are concerned about the way in which national policies and directives are imposed on localities without providing the support for these implementing nodes to perform their duties effectively because they are under-developed. Lowndes (2003) from her perspective of local government, and Newman *et al.* (2004), Williams (2004), Briggs & Sharp (2004), from their research into participatory practices, contend that this is indicative of a strong centralised tendency that contradicts notions of local development, observations that are eminently pertinent within the context of reform in the Breede-Overberg WMA. Local municipalities, water user associations and eventually Catchment Management Agencies are intended to perform functions that were performed by the Department of Water Affairs (DWAF) in the past. Agrawal & Gibson (1999) agree with these authors that adequate funds must be forthcoming to ensure that local institutions can

perform their duties. Remarks that are made by town engineers and public officials operating at the lower tier of government, such as 'who is going to do the work?' or 'our budgets are being cut back and we have less staff' or 'how can we be expected to read everything and make a contribution?' 'the distances are huge and there are not enough people to do the work' are some of the 'facts' that resonate loudly with the ideas put forward by analysts working in the general field of development. And it is these 'facts' that reflect low trust between different tiers of government involved in the job of water delivery and water resource management. The data presented in both Chapter Four and Chapter Five indicates 1) lack of synergy between state and non-state actors and lack of synergy between different tiers of government, 2) interventionist 'top-down' style of government and 3) the aversion that bureaucrats have for change. These three conditions are fertile grounds for low trust and make it difficult to implement the 'spirit of the law' as well as the principles that are so important for the reform process in the water sector.

Andrews & Shah (2001) insights into administrative systems and **bureaucrats' resistance** to change provide a way into understanding the problems that were, and still are, part of the Greater Hermanus Water Conservation Programme and other experiences in the WMA, where innovation - and creative ways of implementing policy - is inhibited and even stifled. This confirms the theoretical propositions put forward by Cloete & Meyer (2003), MacKay (2003), Mutahaba *et al.* (1989), Balogun (1989), Gran (2001) and Andrews & Shah (2001) that bureaucrats/professionals are resistant to change and that the bureaucratic culture obstructs rather than promotes reform because of the partiality for routine duties of billing and costing for water services. Public officials are unsupportive of innovation and creative solutions for policy implementation even though, as Rainey (1991) emphasises, there are constant changes and adjustments that public officials experience because bureaucratic systems are not static. The changes that are being made at this time in the history of South Africa, in the water sector, as in other sectors, are radical. Although policies have changed dramatically, the attitudes and behaviour of public officials are more difficult to change. As the empirical data illustrated, doing new things the old way inhibits trust and undermines new policies but it also perpetuates feelings of exclusion, embarrassment, ignorance or inferiority and can activate shame-based feelings that were experienced during the apartheid regime. Importantly, the opportunity for trust

production as new policies are being introduced is undermined. Not much inroad have been made in the almost 60 years since Selznick (1949) wrote that it was necessary to find ways to make sure that democratic impulses were not undermined by administration or administrative governance. Selznick's (1949) concern was that the spirit of the law could be stifled by a system of rules and formal discipline.

Even if professionals do want to change, change does not necessarily follow, because standard operating procedures are in place and these are inflexible to change. Mutahaba *et al.*'s (1993) insights into public administration suggest that the burden placed on local administration is far in excess of their capacities, and the empirical data presented in this study, confirms his assertion that the public administration is in 'disarray'. Bureaucrats' change-aversion affects trust not only within water services at the local municipalities but also in the water management systems where the organisational culture of public officials – and their intermediaries, the consultants who are driving the CMA process – are also used to doing things the old way. Water users are brought into decision-making venues where agendas are preset, information overload prohibits new information flows and old in-group/out-group patterns are reproduced. The effect is that water users who believed they could make a contribution are disempowered and the result, for some, is to feel stupid, ridiculous, inadequate and embarrassed. When information is, as Newman (2004) notes, 'fobbed off' with words such as 'let's get a move on, this is not the place here to discuss these matters' being only too frequent, opportunities for brokering trust are lost. The frame of reference is limited to acceptable words and ones that 'don't fit' are considered unintelligible and incomprehensible, and that is symptomatic of what Schaap & van Twist (1999) call a 'conscious strategy to reduce complexity....' The 'facts' are filtered through the frame of the pragmatic public officials who control the way that water users perceive reality. 'We will never get anywhere that way' is part of the frame that conserves the status quo and is symptomatic of a need for stability during times of uncertainty.

The study considered the **style of government** to be interventionist rather than nurturing and that the effect of this style is to stifle opportunities for the production of trust, and because water users feel stupid or inadequate, they do not as Luhmann (1979) or Offe (1999) note, take risks, but they also in some situations reproduce the

experience of shame. The empirical data in Chapter Four in particular speaks eloquently to the impulse to be 'pleasing politicians and doing things in the same way' or 'it is supposed to be bottom up but it is not,' 'Pretoria is taking all the decision' or 'will government ever hand over control?' 'Local people know what amount of water should remain for the reserve' and 'this should be determined by local experts' are some of the authentic words and facts that emerged while gathering data, and suggest that the style of government is top-down and interventionist. These influences challenge contemporary notions of development that are supposed to work.

There are, nonetheless, influences from the bottom up that, although tentative, are worth noting. Thwarted by the uncomfortable meeting between the old and the new and facing a reality on the ground that is more untidy than expected - and where the seismatic gap between the have and have-nots is stark - DWAF's plan has not unfolded as expected. As Chapter Three cautioned, one of the core challenges facing DWAF during this period of transformation is to restrain from the temptation of hasty delivery and outcome-based measures of achievement rather than investment in greater levels of social development and capacity-building. The temptation to speed up the delivery process – be it taps or CMAs – and to take decisions on behalf of others reflects an interventionist impulse. Although the intervention and control might be cost-effective in the short-run particularly, in financial capital and time, the trade-off is the loss of trust and impoverished social capital as well as unsustainable delivery and water resource management in the long run. Water consumers, such as those in the fishing village of Kassiesbaai who were not part of the water policy networks during the apartheid years, continue to be deprived of water and the social resources to control or participate in decisions around water delivery and management. The consequence is distrust of government officials and shame-based feelings at not being able to conform to the socially acceptable values that are being proposed or not fitting in for those who feel inadequate and unable to understand water matters.

Evans (1996), Ostrom (1996), Levi (1996) and Agrawal & Gibson's (2001) ideas of **synergy between state and non-state actors** present several challenges. The theorists' concern is for direct interaction between state and non-state actors around a set of rules and incentives where there are mutual achievements and benefits that are

gained from both sets of actors. An interventionist style of government reduces opportunities for exchanges and 'let's get a move on' or 'this is not the place' reflect an assumed authority by one set of actors that is difficult for another set of actors to refute. The style of government affects the way that synergistic relations between state and non-state actors are forged and makes the change from the old to the new more difficult. Formal spaces are controlled and contradictions and tensions appear outside the formal venues only. Trust across segments of water users is difficult to build in the informal spaces because, as Dasgupta (2000), Grootaert & van Bastelaer (2002), Krishna (2002), Warren (1999), Woolcock (1998) and Granovetter (1983) confirm, common interests and norms define the way that groups are formed, and these are shaped today in the Breede-Overberg WMA within in-group/out-group patterns of the past. Sharing of ideas, debate or discussion takes place within groups rather than across groups and new social capital is not generated. The groups do not open up networks and social solidarity, and communal allegiances shaped by the segregationist politics of the past, is repetitively reproduced.

The recurring themes of 1) knowledge, 2) agency and 3) power are interlocked closely with bureaucrats and change, style of government and synergy between state and non -state actors and these themes were taken up and guide the discussions followed in particular in depth in Chapter Five. Newman *et al.* (2004), Parfitt (2004), Williams (2004), Briggs & Sharp (2004), Schaap & van Twist (1999), Kickert & van Koppenjan (1999), Thompson (2002), Gran (2001) and Harris (2004) are some of the theorists whose work was most useful in analysing the relationship between knowledge, agency and power and linking these themes to the themes of style of government, bureaucracies and change and synergy between state and non-state actors.

Lowndes's (2003) observation that management duties have been relinquished but that authority has not, explains why **power** is sustained at the higher levels. The tendency towards strong centralised control in the Breede-Overberg WMA contradicts, as Lowndes (2004) warns, the apparent rhetorical notions of local development where policy is, very thin in substance. Harris's (2004) contribution is to introduce the notion of power explicitly when examining the way that trust is produced or inhibited, placing the emphasis on the relationship between power and

contacts and connections. Although Harris's empirical data is extracted from work in firms and businesses in India, his insights match well with what emerges in the Breede-Overberg WMA. Briggs & Sharp (2004) consider that the incorporation of local knowledge is just place-specific 'tweakings' and note that the 'tweakings' do not allow for any fundamental challenge to the way things are done, developing with these ideas important notions around power that are useful for understanding the way in which things change - but stay the same - in the water sector. Parfitt (2004) notes that power relations maintain an essentially top-down model of development when participation is a means and not an end in itself. The endorsement of participation as an end addresses unequal power relations because it has a politically radical component, not embraced in the Breede-Overberg WMA, which aims to achieve efficiency through what Parfitt (2004) calls coercive persuasion.

'We won't change' or 'this is not the place to talk about that' or 'pleasing politicians seems the preferred way to go' are examples where the dominant **knowledge** regime has empowered some but disempowers others because it appears intelligible and comprehensible for those who are at the centre of the decision making processes. Trust is also undermined when water users feel that their invitation to participate is token: 'how can we be expected to read everything and make a contribution?' or 'I say nothing, I have nothing to say.' Without adequate knowledge, or the time to digest it, water users at the local level are inhibited from giving meaningful input or from developing **agency** and making meaningful contributions to reform in the water sector. The possibility that those who do not understand the intricacies of the reform process could have a sense of pride in being part of it, are remote. Scheff (1990), in his analysis of shame as a determinant of social action, puts forward important observations about intact social bonds that are a result of a positive feeling of pride and are particularly useful in the investigation into social processes of reform in the water sector because they are a reminder of conditions necessary for the production of trust. Water users who feel connected to one another both emotionally and cognitively are able to build trust. But under conditions where water users do not feel good about themselves, they are unable to develop trust for others or to make what Seligman (2000) in his discussion on shame refers to as the symbolic exchange where trust is produced. Water users who do not connect feel incompetent and isolated, reflected in observations such as 'oh, water is such a difficult thing ... or what is going on' but

also, significantly, resonating particularly loudly in the silences so that 'they will not know how ignorant I am'. The analytic framework is most helpful in scrutinising the extent to which power, knowledge and agency intersect, and in illuminating the way in which trust between water users is inhibited when they are made to feel inadequate, uneasy and uncomfortable. Importantly, Wicomb's (1998) ideas that shame stifles its own discourse, or Heller (1985), Tisseron (1992) and Scheff's (1990) observation that shame is a primary regulator of behaviour, provide the analytic framework necessary to understand the social processes that develop in the water sector. The negative chain reaction does not only impact on personal interactions but it has serious repercussions on the way in which the reform process evolves and affects the systems and institutions. Shame is an invisible but a critical determinant of social action, resulting in silence, retreat, exit or disengagement from the reform process. Investigations of trust are enhanced by integrating the ideas behind shame and provide a critical analytic tool with which to examine the process of reform and transformation from the old system of water management to the new. The significance of shame as an inhibitor of trust has repercussions in contexts of change where the features of knowledge, agency and power play a critical role in determining the nature and direction of the change. Shame based feelings are reproduced and activated amongst those who do not have knowledge, agency or power.

For those theorists who elaborate on the theories of knowledge and agency, such as Giddens (1991), Desai (1994) or Offe (1999), agency-shaping and agency-enabling environments further the democratic project, an achievement that is intimately connected to knowledge transfers. Ribot & Peluso (2001) provide clarity about the ideological controls and discursive practices associated with knowledge regimes and contest that those who have the ability to name things are best able to profit and control the processes. These authors are more helpful than Termeer & Koppenjan (1999) who expect that because there is social and cognitive variation there will be knowledge flows, without heeding the dimension of power that is intertwined with knowledge. The ability to name things by some and to obscure them by others, is a way of ensuring that only some will be able to profit and control the process.

Social and cognitive dissonance is reflected in the way that some water users understand figures and can participate in budget discussions while others, with low

literacy and numeracy skills, can't. Barberton (1998) grasps well the importance of information because it provides water users with the tools to protect their interests. Despite the emphasis implicit in the argument that skilling-up and capacity-building will allow people to name things and to master 'the facts' it is every bit as important that the 'facts' are not determined only by those in power and control. The mainstreaming of participatory practice is already a way, according to Williams (2004) to bring those at the margins into the centre and to bolster the power of those who already have it. Mainstreaming participation has, then, the consequence of subjection rather than the reverse, and Williams's (2004) referral to the 'new tyranny,' although a little extreme, is not too far from the truth, for the intention to reduce frustrations by having the business of transformation, as perceived by elites, interrupted is more than likely. Empirical evidence in words such as 'people don't really take time to involve people properly' or 'I don't even know what I am supposed to say' obscures the otherness or different values and visions that are being offered. It is for this reason that Parfitt (2004) recognizes the need for a 'new type of development organisation' that turns top-down development bureaucracies into places of learning. Development organizations that are not places of learning are likely to maintain old ways of doing things and filters that decide what is in and what is out, where decision-making rests in the hands of few rather than all stakeholders. If decisions are taken despite participation, reflected in words such as 'and all decisions have already been made,' then the costs of non-participation are negligible. Those water users who are supposed to act as conduits between the 'experts' and the 'layperson' feel ill equipped to intervene on behalf of the people who they represent and for whom they are elected as 'trustworthy' spokespersons.

Transaction costs of participation

The consequences of undermining trustworthiness are costly, and in some cases the empirical data reflects the embarrassment or inadequacy that is reminiscent of the shame-based feelings depicted by Philips's Boaz in the *Story of Ruth* or Epstein's Tokut in *The Experience of shame in Melanesia.* The feelings of shame at being unworthy and yet being chosen, of not being proficient in 'scientific language' and thus unable to participate meaningfully inhibit opportunities for trust production. These water users have little impact on water policy networks although they are given, in theory at least, opportunities to wield power. For fear of saying anything,

and being ridiculed or feeling stupid, the procedures are uncontested. 'I say nothing, I have nothing to say' or 'I don't feel OK to put up my hand and say anything because …I don't know about these things' or 'oh, I still don't understand anything about water' are manifestations of shame and are also manifestations that 'these things' are defined in terms of a particular type of knowledge. Paucity in trust impacts on the institutional settings restricting the construction of an agency-enabling environment. Empirical data suggests that those who do not have the 'scientific' knowledge cover their inadequacies and remain silent in order to avoid being embarrassed or feeling stupid, 'I know shame, when I am inside the committee I will just say yes until I learn,' and the silence of acquiescence is not going to produce trust '… it is a terrible thing when you feel hollow inside … not knowing anything can make you feel this'. The response of water users who do not understand or who do not know is rational, and although shame is an emotional response the cognitive component is important. Seligman's (2000) argument that trust is rational and a symptom of modernity is affirmed, as the observations indicate that the shame-based reaction is a rational one.

Uncertainty reproduces fear and anxiety, and although this does not always lead to the production or reinforcement of shame-based feelings it is unlikely to produce trust. Scheff (1990) noted that the knowledge of non-experts is considered by experts tantamount to ignorance, an idea that is all too real in the Breede-Overberg WMA. The culture of the meetings had an impact on the researcher, and because the culture of the meetings requires understanding technical jargon the researcher was rendered impotent to challenge, contradict or dissent. Without expert technical knowledge in water matters, silence is a more rational choice than contradiction or question. The rationality of shame is important because it brings shame out of the murky under-waters of 'primitive' or 'traditional' social contexts into the contemporary world with the puzzling convolutions and perplexities of modernity, bearing in mind the problematics that have been discussed in this study, that this term raises.

The link between 'water poverty' and 'income poverty' that Caroline Sullivan (2002) explores in her calculations of a Water Poverty Index are reflected in the Breede-Overberg WMA where participation by commercial farmers and water users who have a higher incomes and the skills and expertise to engage with water matters is easier. Scarcity of water and the capacity to manage it are linked to issues of social

justice and uneven distribution of goods. Certainly farmers as a water user segment have a lot to lose, and the consequences of non-participation for these consumers is high. Entry into the venues is easier and participation therefore carries lower costs in the first place – for instance, transport, resources and so forth to get to meetings, but, importantly, the skills and knowledge that match the frame of reference that is being used. Farmers understand water issues, they can discuss and argue about whether or not the pricing is fair, whether water should be paid for at all, why alien invasive tariffs are so high, who should be paying for hydrological studies, estuarine issues and how these do or do not affect the livelihood of farmers, transfers and the effect of these on crops or pricing and so forth. Farmers have, for years, been involved in decision-making processes and although many of them are characteristically loners they have been united by the common interests of the state and bound in the past not be grievances but by privileges. Today, grievances bind them together and an unintended consequence of reform in the water sector, is that it is this group of water users who are being brought together in Integrated Catchment Management and who are able to understand the philosophy behind watershed management and cooperation. In other words, it is this segment of water users who are having their social capital brokered. The unintended consequence of the CMA process is to strengthen the bonds between farmers who do not trust government because the new laws no longer protect their interests. But is this a symptom of what Seligman (1997, 2000) identifies as trust in the context of modernity or is it simply a closed system of what Eisenstadt (in Offe 1997) calls primordial units that reinforce ties of familiarity, neighbourhood and likeness rather than risking trust in a stranger? Certainly, it appears from the data that trust is high between water users who share common knowledge rather than between water users who are members of a different knowledge regime. Nonetheless, the consultants and state actors are eloquently sharing language and knowledge regimes, and even if pricing and tariff levies are contested there is both cognitive and social variation to dissent and disagree because the same filter is used. The theoretical construct of risk and trust is pertinent. Farmers, who have most to lose, do not trust state actors, and their participation is a manifestation of distrust rather than trust. Following this argument, it is possible that some water users who were previously excluded from privileged access to water are able to trust the government and that, if their interests are not encapsulated by the intermediaries of the state or the provincial and regional state actors, national government will exercise authority and act as

regulators of the new laws to ensure gains from the reform process. Uslaner's (1999) view that state policies are able to produce trust is also helpful, because the lack of interest in the water user committees and forums is, from that perspective, likely to signal high trust in the policies. In the same way that voter turnout during elections might drop during periods of stable democracy, water consumers who were previously sidelined trust that today they are protected by the law and that their consumption needs will be fulfilled, with or without their participation. Although for some water consumers the policies, and trust in the ANC government might be necessary, for others it is not sufficient and their desire to participate in decision-making venues is inhibited by the style of government.

Uncertainty and distrust in the face of deep changes affect different consumers in different ways, and many stakeholders are unwilling to take a risk and trust government officials or their intermediaries until they are, as Luhmann (1995) asserts, adequately assured against losses. Uncertainty and change have the effect of reinforcing what Schaap & van Twist (1999) call network closedness or network fixation, and, as Molenears (2003) notes, the non threatening old networks are more reassuring. Risk-taking in the face of uncertainty does not impel trust but is in fact a repellent of this feature. Because there is so much uncertainty, the role of the state in brokering trust and in catalysing changing patterns of inclusion and exclusion is critical. Opportunities to share ideas need to be nurtured and a less interventionist government would do better to foster trust between government and water users as well as between water users themselves and would do better to ensure that shame-based feelings are not activated.

White elites are by no means a homogenous group, and the difference within groups is starkly apparent in the unwillingness that farmers, who depend on commercial farming for their livelihoods, have to register their water usage. The ideas put forward by Meyer & Cloete (2000), Mackay (2003) and Andrews & Shah (2001) are helpful in understanding the reality because these authors regard the resistance to change as unsurprising. Nonetheless, the resistance to change is also a signal of distrust in the new system of water management that is forcing elites to forego their privileges that have assured their past livelihoods. Paying for water is anathema for most commercial farmers who have prospered under the riparian laws whereby they owned water that

was on their land. For other elites who take up positions of authority in the CMA process, the gains of change, in terms of status and/or financial gains, outweigh the costs.

During the data-collection process, confusion about what was happening and what was said to be happening reflected not the unscientific nature of the research but, on the contrary, the contortions and puzzling contradictions that are part of the transformation process itself. Similarly, the inability of the researcher, as a social scientist, to piece together the 'technical' water matters that were being discussed reflects the predominance of this discourse and the way in which it shapes and controls the process in the WMA. 'Feeling stupid' or 'not understanding' and remarks such as 'oh water is such a difficult matter' are indicative of a water management regime that produces low trust and that shapes the way in which change is not happening. They have everything to do with knowledge, agency and power.

Damned if you do and damned if you don't

The Director General of DWAF, on the occasion of the Inkomati launch and again at the Willowvale Symposium in April 2004, stated that 'there are no blueprints' and that 'this is a process with uncertain outcomes', but the model for CMAs and water user associations (WUAs) allows only for a certain amount of flexibility and is far more rigid than rhetoric proposes. As discussed above, this approach is not incidental but deliberately limits frustration and contestation and reduces opportunities for the public to interfere with the business of state or make demands or changes that could menace the status quo. The Breede-Overberg CMA process allowed for a certain amount of flexibility but overall the process was pursued with an end product in mind that was minimally negotiable. Water expert elites and state actors drove the process, which had anticipated and predetermined outcomes. Consensus from below was in the main co-opted. The identity of two very different water management areas, the Breede and the Overberg, were merged despite the feeling of water experts in the Overberg that this was not necessarily the way to go. Two water user associations were created in a relatively short period of time driven by experts and propelled forward as an indication of achievement and outcome rather than process. As a forerunner, the Breede-Overberg CMA is, in the words of DWAF, close to 'the winning line',

following behind the nation's first that was launched in March 2004. Six years after the National Water Act (Act 36 of 1998), these are remarkable achievements.

Yet these gains must be measured against other losses. The prolonged absence of trust leads, as Sztompka (1997) noted, to an embedded tradition of distrust and makes construction of new institutions difficult. The near completion of the CMA is a feat that can be heralded with pride, nonetheless, the gaps between anticipated gains of participation, between the drive for demand rather than supply management, Integrated Resource Management and decentralised decision-making involving a wide range of stakeholders are disquietening. The unwillingness, for instance, to acknowledge the important changes that demand-driven water management principles bring with it is apparent in the water conservation project in Greater Hermanus and illustrates the inability of a local municipality to perform its duties and to meaningfully implement policy. Aversion to change is also apparent in the assertion by water user elites that 'we will not change' in transforming irrigation boards into water user associations.

It is also notable that the state has not used its authority to counteract the tendency, voiced by Evans (1996), of local elites to dominate. Social fixation continues in the new systems despite the fact that according to Termeer & Koppenjan (1999), it could be influenced by external pressure and the threat of regulation by government. The actors cannot be excluded as this would contravene the law, however the spirit of the law is contravened by a more subtle form of informal exclusion, and here the work of Schaap & van Twist (1999) is particularly helpful in examining examples of veto power. Unsurprisingly, because the 'scientific' is considered 'fact,' the veto power has been structured by the reality of wealth, or member-worthiness measured in terms of financial and human capital, that excludes those who lack it. With a disempowered periphery, decisions taken by those at the centre do not need to be modified.

The failure of the state to regulate and pressure elites is reminiscent of what Marais (1999) noted as 'pleasing friend and foe' and an admittance that the capacity and expertise lies in the hands of elites whose resources are needed for the project of change. An irony because the self-same elites retain their positions of power and, as

has been argued in the previous chapter, the unintended consequence of the National Water Act has been to reinforce white supremacy in the water sector.

Nonetheless, interpretations of what is happening signal extraordinary, and possibly unintended, consequences of 'failure' and suggest in other ways a positive and important cooperative relationship between state and non-state actors. In other words, the signal can be interpreted as not one of failure and lack of synergy between state and non-state actors but rather one of sufficient negotiation and interaction between the two sets of actors who, as Kickert & Koppenjan (1999) state, impose their will for the state to claim at least a partial retreat on its planned project. The scientific project of constructing CMAs has evolved because of interjection, interrogation, doubt and uncertainty – a symptom of Popper's rational steps for scientific achievement. The restructuring of the Department to accommodate proto-CMAs and to manage and operate water from within the state infrastructure can be interpreted as a positive democratic achievement where there has been synergy between state and non-state actors. DWAF has accepted that only five CMAs are likely to be up and running by March 2005, a far cry from its primary and ideal vision.

The review of the project of establishing CMAs in all nineteen WMAs is a product of wide range of actors making their voices heard, matching well with the theories of Brynard (2000), Ostrom (1996), Evans (1996) and Agrawal & Gibson (1999) who recognise that both bottom-up and top-down forces simultaneously shape the way in which policy develops. Although the overwhelming interventionist style suggests a determination that is state-driven and, as Katerere (2002) noted, the exchanges are very much controlled, the decisions that are currently being enforced in the water sector are likely to be the product of top and bottom interventions.

DWAF's acknowledgement that the route to Pretoria might be different, is an indicator that all is not going as planned and that it is less easy to control from the centre than envisaged. Enforcement of policy that is vague and lacks substance is much more difficult than enforcement of licensing, billing and registration that involves hard data and is part of the 'facts' as known by water experts. It is an acknowledgement too that policy lacks the substance needed to implement deep change and that it is necessary but not sufficient for transforming the old water

management systems into new. Whether out of willingness or necessity that the plan to set up CMAs in all the WMAs simply will not work, DWAF is today restructuring the Department to set up proto CMAs within government structures.

Resistance to change is also linked to features of power. The retreat of the state to the centre could, on the other hand, be interpreted as a sign that Lowndes (2003), Cameron (1999) and Mutahaba *et al.* (1993) consider as an inability to relinquish control and the realisation that the separation between authority and management functions is not only an uncomfortable one but is nonsensical. Participatory processes entail far more challenges to the status quo than intended, and it is likely that the threat to established power and authority restrained the desire for deep change, the consequences of which are far greater than foretold. In other words, in 1996 the conception of the National Water Act, through the Water Law Review Process, was premature in so far as those involved did not fully envisage the effect of the rhetoric.

Rainey's (1991) observation that successful change requires support from above, participative planning and flexible implementation, has resounding significance in explaining why the Water Law Review Principles are so difficult to implement, 'our budgets are being cut back and we have less staff ...' Three of the key political elements that Oluwu & Wunsch (2004) identify as contributors to effective local government stand in the way of driving forward the project of the CMA at the local level and contribute to low trust: 1) the ability to identify problems, 2) to set priorities and 3) to mobilise resources, making, as Golola (2003) contends, 'nonsense' of earlier attempts by central government to devolve decision-making closest to those who it most affects. The problem of restriction on participative planning, as presented in Chapters Four and Five, is largely due to the insistence on doing new things the old way, embracing a scientific organisational culture which is not opening up to new information exchanges, intervention that prohibits flexibility and so forth. Simply soliciting more input from citizens does not increase local institutional autonomy and it does not deepen democracy. Decisions continue to be taken at the higher levels.

Revisiting notions of trust

The ideas about trust as a rational choice, juxtaposed as they are by some theorists (Coleman 1990; Hardin 2001; Seligman 2000) as different to network capital which is

reliant on locality, neighbourhood ties, friends and family, are problematic. In the contemporary setting, geographical and social landscapes are interlocked, stretching beyond neighbourhoods into terrains where there are benefits and costs in alliances between foe a friend. In the Breede WMA, a small-scale farmer as a next door neighbour might be threatening to a commercial farmer and the distinction between family, friends or neighbourhood familiarity (presumed traditional or pre-modern), as opposed to trust-based relationships with strangers (presumed modernity), is unhelpful. The Ruensveld/Duivenshok rural water schemes reflect networks that are based on both trust and familiarity and the perpetuation of old networks or closed and fixated networks, although contemporary and modern, is primitive and primordial in its rejection of innovation, respect, mutual compassion, openness to the view of the other and so forth. Are the farmers in the Ruensveld and Duivenshok a product of modernity in their ability to articulate and participate more than other water users in the forums? Or are the farmers of the Ruensveld and Duivenshok rural water schemes and the elites and experts that are in the WMA embedded in primordial units of similarity, tradition, likeness? And are the villagers of Kassiesbaai less modern because they have network and not social capital, bound together by locality, neighbourhood and family/friend ties, or are they just poorer? Does being connected to water experts and elites propel one into modernity or is it a result of old ties and networks that are primitive in their inability to assimilate strangers?

The narrative of the farmers in the Ruensveld and Duivenhoks region of the Overberg, presented in Chapter Five of the study, indicates that commercial farmers are embedded in social networks centred around issues of water management and that they have, over time, developed social capital both between themselves and with government officials. The gains of cooperating together were both economic and financial, but also produced feelings of pride and respectability. Although they are unable to bend the rule of the law and are enforced today to license and register despite their lack of trust in the process, they are vocal and able to raise concerns. On the other hand the residents of the small village of Kassiesbaai were shown to be lacking in opportunities to develop social networks that go beyond the ties of family and neighbourhood. Today their voice is absent in the water policy networks. The experience of mistrust and exclusion are deeply engrained in the historical memory of the residents of Kassiesbaai, who in the contemporary setting of water management

institutions in the Breede-Overberg WMA are unable to find government officials trustworthy in matters concerning water. The social capital of commercial farmers and water experts and the lack of social capital of Kassiesbaai or other poorer residents in the WMA, influences the construction of contemporary water institutions.

How useful are the trust/risk ideals in understanding the empirical data? Is risk a driver or an impediment for trust? Is the idea that trust is an ability to believe despite uncertainty concerning the outcomes helpful, or is more to do with trusting someone else that will be fair and truthful and that has your interest at heart? Does uncertainty in the water sector drive trust or is it trust-averse? DWAF is faced with an enormous challenge because there is no blueprint or map as to how to do it and because new players are not yet equipped to participate meaningfully. Identifying expertise is part of building institutions, but expertise is considered to be 'scientific' and 'objective' and this expertise lies in the hands of white males. The principles that emerged from the Water Law Review Process were pushed forward with optimism, but today DWAF acknowledges that the 'big bang' way is not the way to go because the terrain is riddled with social uncertainty and the anticipated reform in the water sector is experimental in nature.

The Water Law Review Process identifies one of the major obstacles for the success of Integrated Catchment Management as the lack of experience and inadequate involvement of all stakeholders, but it also posits that there is sufficient expertise and skill at the local level that can be harnessed. The unwillingness of government to trust and see the level of expertise that does exist in the Breede-Overberg is, according to Schaap & van Twist (1999) note, an inability rather than an unwillingness to see according to the local water user. But from the perspective of the local water user, local expertise is not lacking; 'we can do it by ourselves, the people here can get on with it and we don't need outside experts or 'Sun City' consultants', 'Pretoria is taking all the decisions.' Contrary to what Schaap & van Twist (1999) note, this speaks to a disconcerting unwillingness, rather than an inability, to acknowledge skills and capacity at the local level. The benefits of change for central government do not outweigh the costs, for the cost of deep change is a reconsideration of the status quo.

Policy lacks substance, and its ability to enforce overall vague notions of localised water user participation is restricted. The vagueness discussed in Chapter Five can be considered as an indicator of the reluctance to relinquish control, for participation, central to the achievement of the 'scientific' project of CMA construction, remains largely underdefined. The ideas put forward by Williams (2004), Woolcock (2004), Parfitt (2004) and Newman *et al.* (2004) demonstrate that the toolkit for participation has not been prepared and power relations remain unequal. Without a clearer understanding of the relationship between knowledge, power and agency, reform in the water sector will remain undeveloped. The rational choice argument assumes that individuals make rational choices and that one set of actions will have expected outcomes. Commercial farmers not willing to give up their economic benefits and the power that goes with them, government officials unwilling to cede power to local authorities, state actors unwilling to cede power to non-state actors, water users who have knowledge that is 'western' unwilling to cede the knowledge to those who do not have it, national government unwilling to cede to regions, are some of the binaries that have everything to do with power.

DWAF acknowledges that there is 'a long way to go' and that 'they could do more' but these acknowledgments have not yet addressed the root cause of non participation. Throwing money and resources at the problem will not solve it. Kuhn (1962) said that when the answers to the problem are not within the paradigm it shows that a new paradigm is needed. Science is based on experimentation, testing new ways, new ideas, trying new avenues and alternative solutions to the same problem. At the core of the risk argument is the notion that modern or rational man takes a risk and lets go of power by putting trust in another who shares common interests. If the intention of policy is to drive forward its principles and to embed ideals in reality, then risk-taking is needed. The go-it-alone strategies of commercial farmers are being challenged as they look beyond the mountain and the borders of their own farms to the wider watershed area, the previously disadvantaged are being thrown into forums where they are asked to trust others who are assumed to have their common interests at heart – but who do not show sufficient signs of this being the case – but the trust that government has in water users is lacking. Government holds tightly to the strings for fear of devolving decision-making to the lowest levels with the result that the new institutions are not dissimilar to the old. On the one hand, the regulatory role of the

state is necessary to ensure that local elites do not sabotage reform, but on the other, over-involvement at the national level undermines local authorities and erodes trust that might develop between water users themselves, as well as between water users and government.

Institutionalism and the creation of trust

The 'spirit of the law' is undermined by the style of government that manages rather than nurtures change, focusing on outcome and 'getting to Pretoria' too fast, rather than process and being too hasty in providing templates, answers and agendas. Because the formal spaces are confined, water users gossip and bemoan in the 'betwixt and between' spaces outside the formal venues. Instead of producing trust between groups and promoting changes in social configurations, old patterns of the past are only too present. Despite the heterogeneity within groups, uncertainty and distrust is muffled across group and only expressed within segments. Because trust is produced or reinstated within group, vicious rather than virtuous cycles that are noted by Putnam (2000), Ingelhart (1999) and Krishna (2002), or what Mishler (1997) refers to as bad and good cholesterol, match only too well with the reality in the Breede-Overberg reform process. Power is equalized and knowledge shared within groups, reconstructing and reproducing familiar patterns rather than creating new ones. Many of the exchanges take place in informal spaces where DWAFs influence is limited and because there is so much uncertainty, the benefits of taking risks with 'strangers' or newcomers do not outweigh the costs.

The need to maintain the new organization with old patterns drives mechanisms of participation that are expedient and immediately most effective, but the empirical data shows that the idea that Selznick (1949) put forward of restrictive pressure on the exercise of democracy is real. Unfortunately, as Selznick (1949) warned, uncontested, organisational action once initiated tends to push on. It is for this reason that the reconsideration of the way to Pretoria – and that only five forerunners are likely candidates for CMAs – is a positive signal that there is an alternative to pushing on.

Generalised low trust

During the investigation similar problems were emerging within different contexts suggesting that because similar conditions were found in different settings, low trust

was generalized. For instance, within the setting of WUAs, water users with entrenched habits, practices and networks, focus on infrastructure capital has not been replaced by a focus on social assets. These forums repetitively render impotent the claims of many water users and amplify the voices of others. The decisions that are being taken concerning water upgrades for the village of Kassiesbaai, whether or not they reform and improve access to water for those who do not have it, are made with or without the voice of the water users. In the Breede-Overberg Stakeholder Forum or Breede-Overberg Reference Group, trust between small pockets of elites and government is high, but trust is low between water experts and government and between non-experts and experts. It is between non-experts and experts that shame-based feelings are most apparent. In the Greater Hermanus Water Conservation Project, trust between departments at the municipal level is low because bureaucrats are resistant to change and the project of furthering innovative new policies is not adequately supported at the higher levels. At the level of planning for catchment strategies for localised catchments within the WMA, trust is low because of uncertainty of roles and functions of local water users and because the authority has not been devolved although management functions such as ensuring licensing, paying for Alien Invasive Vegetation Clearing activities, collection of waste discharge fees and so forth are the responsibility of local water users. The production of trust is threatened because the style of government is interventionist and decisions are made at higher levels that affect the regional and local stakeholders. Not only is innovation blocked but trust is undermined as local consumers feel their contribution to the CMA building process is not taken seriously. The interventionist impulses also have the effect of activating shame-based feelings in water users who were previously excluded from decision-making in the water sector. Water users who feel shame are unable to engage with other water users and trust is curtailed.

The absence of trust-based relations within water catchment areas endures into the post-apartheid era despite the fact that the National Water Act (no 36 of 1998) promotes greater cooperation within water management systems. The creation of social capital, and in particular the attitudinal and cognitive component of the construct, does not occur through legislative fiat. The manifestation of shame as a social behavioural form by the still-marginalized underclass reflects the fact that the water policy network continues to manifest high degrees of closedness. The

deference to the technically informed and the bureaucratic, specialized language that is utilized within water policy discussions operates either intentionally or unintentionally both of which are likely, to exclude potential newcomers.

Changing social and political environments brings with it a constant questioning and has the potential to reconfigure social patterns. The issues of trust and shame are invisible but of importance in the establishment of new patterns of belonging and in readjusting new identities and social solidarity. The discussions put forward in this study have highlighted the usefulness of the construct shame in investigating certain types of social action and have argued for its place alongside trust because it impacts on negotiations, issues of trust and the forging of new identities in administrative systems. The role of the state in the production of trust is critical.

Delivery now includes not only the reticulation of pipelines but the reticulation of people. When a process of integration takes place, the willingness of the actors to perceive the 'facts' happens when scientific and technical language is translated into language that is simpler, meanings can be shared and meeting-ground is possible. In the water sector certain areas will remain highly technical, and in some specialized domains it would be inappropriate to expect all water users to have the same expertise. But it is realistic to expect exchanges in both domains and that substantial knowledge by local water users and knowledge of local water users is expected. Expert and technical closedness is possible because of the highly technical nature of discourse around, amongst other issues, irrigation systems. Pursuing the argument of the exactness of science presented above, scientific discourse is inquisitive and its legitimacy depends on it inventing alternatives. The meaning attached to notions of change and reform will determine the nature and extent of the transformation. It is unlikely that the changes will be as radical as expected.

Summative remarks

The conclusion has shown that there are ways in which the inquisitive inquiry pursued by state and non-state actors is activated and that there are ways it is stifled. It has shown the effect of this pursuit on the production of trust and the activation of shame-based feelings.

In order for the National Water Act to be effectively implemented, an improved, more accessible system of network communication is essential, along with a reduction of the highly technical and formalistic language used in documents and at meetings. Water management bodies need to more assertively seek to enhance the building of trust relations and reduce feelings of shame among ordinary water users and small farmers. Thus far, from the observations that have been made during the course of this study, the power relationships have played a role in restricting opportunities for the production of trust and they have, in some cases, activated or produced shame and an environment that is disabling for reform. Water policy reform requires a more substantive and meaningful expansion of network structures in a participatory and inclusive direction.

Trust is a valuable but volatile resource and the broader set of analytic tools have provided a scaffolding using the set of analytic themes: style of government, way in which bureaucrats accept or resist change, ability of non-state and state actors to develop synergistic relationships, equalising of power, meaningful transfer of knowledge and creation of an agency enhancing and agency-enabling environment. Trust is a product of a set of 'ideal' conditions, public officials being trustworthy, trading credit slips between water users, having a sense of agency and being able to understand and share information and equalise power. The ideals of trust present trust as a product of democratic processes and that in these ideal conditions trust, as an experience, is reproduced and smoothes relationships. But trust belongs to the cognitive/emotional deference system where it is constantly reconstructed, renegotiated and reinstated. In order to better understand the politics of trust and social uncertainty, a wider set of analytic tools is necessary. High trust exists between elites and public officials who speak the same language and exchange credit slips in ways that advance the project of building the CMA. It appears that the process is being propelled forward by a small group of elites and that water users who are part of the knowledge regime and understand the rules of the game are able to participate, albeit it with a trust that is more uneasy. At the Willowpark symposium (April 2004), DWAF's acknowledgement that 'public trust is earned through openness, outreach, consistency and sharing information' is critical, but it remains an ideal that DWAF struggles to implement. Pockets of trust and manifestation of shame-based feelings in some cases where water users feel inadequate and embarrassed by their lack of

knowledge, rather than generalised trust amongst water users, suggests that the democratic project of transformation in the water sector is more problematic for many water users than anticipated.

The six themes highlighted above are latent in much of the trust literature, but deconstructing these themes and including ideas on shame, has provided a more robust toolkit for the investigation of the attitudinal component of social capital and has avoided some of the problematics identified by theorists that trust is too vague, means different things to different people or is too loose a term to be helpful. It also addresses head-on some of the critical shortcomings of measuring trust by providing a set of variables and indicators that go to the core of the trust problem.

The conclusion has considered the 'facts' from several angles. Questions remain unanswered. Is non-participation a manifestation of high trust amongst water users and a signal that the project of deepening democracy is being realised? Is the retreat of the state a failed project of localisation and an illustration of an inability to relinquish power? Or on the contrary, does it show remarkable cognisance of the complexity and social uncertainty that cannot be driven forward with quick fixes as was anticipated? In other words, can the restructuring of the Department to manage proto-CMAs from within government be considered an achievement of state and non-state actor synergy or the contrary? The expansion of the analytic tools has provided a model for assessing whether or not reform has been successful and where and in what ways the project of reform has attained its goals. Successful reform cannot be measured only in terms of farmer compliance with licensing, because this is a measure of the achievement of enforceability of the law and not evidence of the production of trust. The difficulty of enforcement in social processes is a reflection of the difficulty to provide a 'quick fix' for intangible goods and the intended or unintended vagueness around what is needed. It is not surprising that the achievements in reform are in the domain of the 'scientific' and that the social elements remain largely impenetrable and incoherent. The study has brought the unintelligible to the fore and, in so doing invites a more 'scientific' understanding of the social facts and in particular the way in which trust is produced or inhibited.

Step by step
Personal journey of exclusion and inclusion

A restless ambivalent relationship with my identity as a white South African woman sent me roaming through the hills of Quercy in France where, embedding myself in a network of French farmers, producers of wine, goats milk cheese and tobacco, I lived in an old barn with no electricity and water, replacing my own social uncertainty in a thorough love and easiness with the local farmers. Today, I retain my swearwords, my slurking soup in the bowl and my dunking bread in my tea. But I know in my bones the voice of the mother who calls from one side of the Quercy hills to the other, without a telephone, unable to read and write, washing her sheets on the old smoothe stones at the spring in the valley. The village dances once a year where neighbours forget their differences and gossip dwindles to the sound of the harmonica and organ grinder. This was my college of learning, where I learnt about in-group/out-group patterns, the fear of the outsider, the heterogeneity of communities, the liminal spaces of gossip and cracks, the changes and resistance to modernity as tractors were fitted with DVDs and drop pits were replaced with flush toilets. And importantly, I learnt to bury my shame, the feeling of not belonging, of being different, that had chased me to another continent where my identity took 'puzzling distortions' that played themselves out over twelve years.

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Appendix One[1]

Area of interest

The area of interest is the Breede Water Management Area as defined in Government Notice 1160 of 1 October 1999. The area is defined as:
Tertiary drainage regions G40 (excluding quaternary catchment G40A, G50, H10, H20, H30, H40, H50, H60 and H70

The Breede WMA comprises the entire Breede River Basin which is the secondary catchments H1 – H7 and the coastal catchments of the Western and Eastern Overberg which is comprised of secondary catchments G4 and G5. The Breede WMA is bounded by the Berg WMA to the west, the Olifant-Doorn WMA in the northwest, the Gouritz WMA to the north and east and the Atlantic and Indian Oceans in the south.

The proposed name, by the CMA Reference Group for the CMA is the Breede-Overberg Catchment Mangement Agency.

The area is defined as the catchment areas of the Breede River, The Sonderend River, the Sout River, the Bot River, the Palmiet River, including the coastal areas from Rooiels in the west to San Sebastian in the east.

Two major impoundments in the Breede River Basin are the Greater Brandvlei Dam and the Theewaterskloof Dam. A large number of farm dams command substantial portions of the catchments in the Ceres Basin and the upper Breede. In the steeper valleys found in the Hex River and Riviersonderend catchments, farm dams are used to store run off from mountain streams. In the broad, flat middle Breede valley, farm dams are used for balancing storage and are fed from an extensive system of canals and pumping schemes conveying water from the Brandvlei Dam. The only significant dam constructed since 1995 is the new Ceres Dam on the Koekdouw River immediately upstream from Ceres. All towns in the area are supplied from surface water resources. Larger towns are supplied from dams. Most of the dams also supply water for irrigated agriculture in the surrounding area.

In contrast to the Breede River Basin, and to some extent the Western Overberg, towns and farms in the Eastern Overberg are heavily dependent on groundwater supplies to meet existing water requirements. Surface water supplies are mainly received from the Ruensveld West and East schemes which supply water from the Riviersonderend River to the rural areas. The Overberg Water Board operates these schemes. Both of these schemes are operating at or near design capacity. The upgrade of these schemes to supply coastal towns such as Waenhuiskrans, is currently under consideration.[2]

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[1] Source: Process of development of a Proposal for the Establishment of a catchment management agency for the Breede Water Management Area. Document prepared by Louis Bruwer Consulting Engineers

[2] Source: This section has been sourced largely from the proposal for the establishment of the Breede-Overberg Catchment Management Agency: July 2003

Approximately 85% of the total volume of water supplied to towns and communities in the Western Overberg is from conventional surface water resources. The town of Stanford is fully supplied from a spring, while Gansbaai mainly relies on groundwater as well as an allocation from the Kraaibosch Dam. Water supplies to Pearly Beach and Stanford will require augmentation within the next ten years.

Institutions responsible for water management in the Breede WMA in 1999 were: DWAF, Overberg Water Board, Irrigation boards (61) - in the process of transforming to Water User Associations -, municipalities and water and sanitation committees.

By 24 January 2001 eight irrigation boards had been completely transformed into water user associations: Mathinusvlei WUA, Central Breede River WUA, Agterkliphoogte WUA, Noree WUA, Willemnelsrivier WUA.

The following table shows the municipalities, towns and villages in the Breede WMA

District Municipality	**New Municpality**	**Towns & Villages**
Boland District Municipality		
	Witzenberg Municipality	Ceres Prince Alfred Hamlet Wolseley, *Tulbach*[3]
	Breede Valley Municipality	De Doorns Worcester Rawsonville *Touws River*
	Breede River/Winelands Municpality	Robertson Montagu Ashton McGregor Bonnievale
Overberg District Municipality		
	Theewaterskloof Municiplaity	Villiersdorp Grabouw Botrivier Caledon Genadendal Greyton Riviersonderend
	Overstrand Municppaolity	Hangklip/Kleinmond Greater Hermanus Stanford Gansbaai
	Cape Agulhas Municipality	Napier Bredarsdorp Struisbaai
	Swellendam Municipality	Barrydale Swellendam Suurbraak Infanta
Garden Route/Klein Karoo District Municipality		
	Langeberg Municipality	Slangrivier Witsand *Heidelberg* *Riversdale* *Albertinia* *Gourritz* *Still Bay*

[3] Towns in italics fall outside the Breede WMA

Other institutions involved in water management and water related matters in the area are:

- Provincial Administration: Western Cape
- Provincial Department of Agriculture
- District councils
- Department of Environmental Affairs
- Cape Nature Conservation
- National Parks Board

There are also informal committees managing small water abstraction works, mainly situated higher up in the mountain valleys above the reaches of pumping schemes
Water forums such as the Ceres Water Forum
Conservation associations or conservancies such as the Lower Breede River Conservancy

Appendix Two[1]

Stakeholders in the Overberg

The formal CMA proposal development process began in October 1999 and culminated in a series of six public meetings held from 10 to 25 November 1999. A second round of 6 public meetings was held during the period 9 February 2000 to 1 March 2000

A final round of six public meetings was held in November 2001 before finalisation of the Proposal for the Establishment of a Catchment Management Agency for the Breede Management Area.

The following Catchment Steering Committee meetings were held:
Onrus River (March, May and June 2000)
Palmiet River (March, April, May, June 2000)
Bot River (March, May 2000)
Klein River (March, May 2000)
Overberg East (April 2000, May 2000)
Uilkraals River (May 2000)

On 20 June 2000 all members of the Steering Committees were invited to a stakeholder meeting for the whole Overberg Area. Membership for the Overberg Stakeholder Committee was finalised.

This committee met six times between August 2000 and November 2001. The meetings discussed membership of the CMA Reference Group and prepared members for the CMA proposal development process. The Overberg Stakeholder Group was disbanded after April 2002 when the first proposal was submitted for approval. The meetings are continuing and have been held at least three times a year but the name of each committee, aligning itself with terminology of the National Water Act, has now changed to a Catchment Forum from the previous name of Steering Committee.

The table below shows the existing fora and main issues that are discussed in the Overberg.

Appendix Table One: Overberg Catchment Forum: status and issues

Name of catchment forum	Main issues	No of members represented on Overberg Stakeholder Committee
Palmiet River	Focus on controversial development in the catchment and concerns about transfers to the metro. Has drawn up a catchment management strategy and is waiting for the establishment of the CMA to implement it	3
Bot River	Ceased to exist	4
Onrus River	The most water stressed catchment in the Overberg. Water demand management is considered a priority for both farmers and domestic water users. Considering forming a WUA to formalise the provision of water from the Onrus River and the various groundwater resources in the catchment	4

[1] Source: Proposal for the Establishment of a catchment management agency for the Breede Water Management Area

Klein River	Possible source of transfer to Onrus River catchment. Local authority commissioned a "State of the Klein River Catchment Report". Decrease in river flow could have impact on ecologically sensitive Klein River lagoon.	4
Uilkraals River	Was instrumental in securing water and sanitations services to Baardskeerdersbos, a small village that evolved on a farm in the area. The forum's main focus has been the lack of support from DWAF and the Western Cape Nature Conservation Board in clearing alien vegetation in the catchment	4
Overberg East	Drawn up a State of the Overberg East Catchment Report	4

Stakeholders in the Breede River Basin

The public participation process in the Breede River Basin was tied closely to the Breede River Basin Study (BRBS) which began in 1999 and was completed in June 2002. It was conducted under the auspices of DWAF. A close link was established between the BRBS and the CMA proposal development process. The BRBS Stakeholder Committee was used as a key constituent of the CMA Reference Group, together with the Overberg Stakeholder Committee.

The first public meeting was held in November 1999 and the second in Robertson in March 2000.

The BRBS stakeholder committee met for the first time in April 2000 and again in September 2000. In August 2001 an ad hoc meeting of the BRBS Stakeholder Committee was held in Robertson. The final BRBS report took place in October 2001 and November 2001. There were a series of individual meetings to discuss the second draft of the proposal between October 2001 and November 2001.

The following geographic regions were represented on the BRBS Stakeholder Committee

Ceres/Rawsonville
Worcester/De Doorns
Roberston/Bonnievale/Ashton
Villiersdorp/Riviersonderend
Koo/Montagu/Barrydale
Swellendam/Witsand

Collective of Breede and Overberg Stakeholders[2]

The BRBS and Overberg Stakeholder Committees came together for the first time in November 2000 as the Breede WMA Stakeholder Forum. It was agreed that a smaller committee called the CMA Reference Group should take the CMA proposal development process further in close cooperation with DWAF and the support team.

The CMA Reference Group met six times between February 2001 and October 2001

[2] Henceforth referred to as the Breede Water Management Area

The Breede WMA Stakeholder Forums met for the second time in November 2001 to discuss the second draft of the Proposal as well as membership of the Governing Board of a proposed CMA.

The draft proposal was submitted to DWAF head office during 2003. DWAF requested several changes.

The CMA Reference Group met in December 2003 to discuss the proposed changes, especially with regard to the way in which the financial viability of the future CMA had previously been calculated. The role of the Advisory Committee was discussed and three members of the Reference Group were elected to serve on the Advisory Committee

Appendix Three

Interview schedule

Category: Town engineers, public officials	Organisation	Location of meeting	Date
1. James van der Linde	Overstrand Municipality	Hermanus, Robertson, Worcester	November 2000, October 2001, April 2003, January 2004
2. Henk Matthee	Overberg District Municipality	Bredarsdorp	October 2001
3. Andre Schutte	Ceres Municipality	Ceres	February 2002
4. Dawie Kruger	Provincial Planning	Cape Town	December 2001
5. Carl Koegelenberg	Theewaterskloof Municipality	Caledon	June 2001
6. Pilla van Groenewald	Aghulhas Municipality	Bredarsdorp	October 2001, November 2001, July 2003, August 2004
7. Louis Jordaan	Aghulhas Municipality	Bredarsdorp	October 2001, November 2001
8. Marina van der Merwe	Western Cape Provincial Government	Cape Town	January 2002
9. Trevor Rubelli	Ethekwini Municipaliity	Durban	March 2003, August 2004
10. Neil Mcleod	Ethekwini Municipality	Durban	March 2003, August 2004
11. Teddy Gouden	Ethekwini Municipality	Durban	March 2003, August 2004
12. Tony Myles	Onrus Catchment Steering Committee	Onrus	February 2001, September 2002
13. Randel Adriaans	City of Cape Town	Cape Town	March 2002
DWAF and non-DWAF policy makers			
14. Bill Rowlston	DWAF	Johannesburg	April 2004
15. Francois Junod	Non-DWAF advisor	Pretoria	March 2004
16. Willie Enright	DWAF	Cape Town	November 2000, February 2001, March 2001, August 2001, November 2001, April 2002, November 2002, April 2003, May 2003, February 2004, July 2004
17. John Roberts	DWAF	Cape Town	November 2000, February 2001, November 2001, February 2004
18. Rashied Khan	DWAF	Cape Town	March 2001, September 2003
19. Derek Weston	DWAF	Pretoria	April 2004
20. Eiman Karar	DWAF	Johannesburg	April 2004
21. Silas Mbedzi	DWAF	Johannesburg	April 2004
22. Christo Marais	DWAF	Cape Town	January 2002, August 2002, March 2003, August 2004
23. Guy Preston	DWAF	Cape Town	March 2003, Feb 2004, uly 2004
24 John Briscoe	World Bank	Washington	July 2001
25. Vincent Baard	Central Breede River Water Users Association	Robertson	August 2001, September 2001, September 2003
26. Tony Myles	Chairperson Onrus Steering Committee	Onrus	November 2000, February 2001
27. Frans Stofberg	DWAF		January 2001
28. Dawie Theron	Overberg Water Board		August 2001
Consultants			
29. Sharon Pollard	AWARD	Johannesburg	April 2004
30. Andre Gorgens	Ninham Shand	Robertson	August 2001
31. Sarel Bruwer	Onrus Catchment	Onrus	February 2001, October 2001, February 2002, September 2002
32. Dries Potgieter	Overberg Water Board	Heidelberg	May 2002
33. Danie Theron	Overberg Water Board	Heidelberg	May 2002
34. Louis Bruwer	Bruwer Consultant	Robertson	August 2002
35. Guy Pegram	Pegasus Strategic Management	Pretoria	March 2004
36. Kevin Wall	CSIR	Pretoria	April 2004, August 2004
37. George Constantinedes	-	Johannesburg	March 2002, September 2002
38. Dennis Toens	Toens & Partners	Arniston	January 2002, August 2002, April 2003, September 2003
39. Doreen February	Nosipho Consultant		February 2001, November 2001, February 2002
40. Dirk Versveld	-	Robertson	August 2002
41. Bea Whittaker	Milkwood Communications	Robertson, Stanford	August 2001, September 2003, February 2004

42. John Reynolds	Acer (Africa)	Worcester, Robertson	November 2000, August 2001
Councillors			
43. Big Joe		Ivory Park	September 2003
44. Randall Stevens		Kassiesbaai	July 2003, February 2004, uly 2004
45. Evelyn Swart		Kassiesbaai	December 2003, July 2003, July 2004
46. M Skenjana		Worcester	August 2001
Farmers			
47. Sebastian Beaumont	Beaumont Wines	Botriver	September 2001, October 2001, April 2003,
48. Niel Giliomee	-	Arniston	November 2002, January 2003, July 2004
49. Martin Heydorn	Prinskraal	Arniston	January 2003
50. John Solomon	Crocadile Valley Estates	Nelspruit	January 2004, September 2004,
51. R van Dijk	Cogmanskloof Irrigation Board	Montague	September 2001, February 2002
52. B Prins		Robertson	August 2001
53. C Olivier		Hexvalley	January 2001
54. C Du Plessis		Robertson	September 2001
55. T Delport	Overberg Farmers Association		November 2000, August 2001
56. Rastafarian	Central Breede River Water Users Association	Robertson	November 2001, September 2003, October 2003